



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

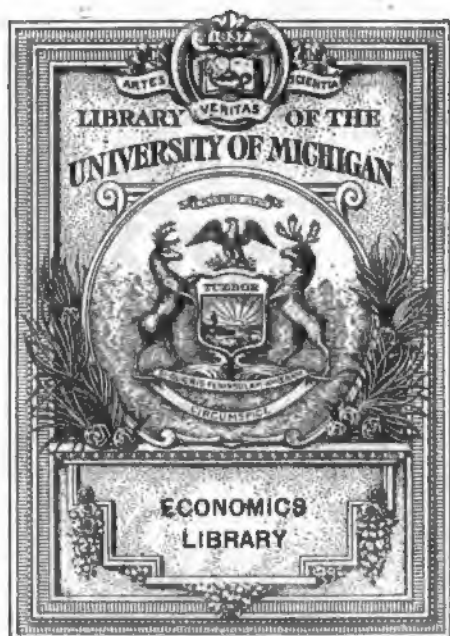
We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

A 768,720



HB
179
-262
-27
-28
-29
V.1



PRINCIPLES OF ECONOMICS



PRINCIPLES OF ECONOMICS

BY
W. G. Pierson
DR. N. G. PIERSON

TRANSLATED FROM THE DUTCH BY

A. A. WOTZEL

VOLUME I

London
MACMILLAN AND CO., LIMITED
NEW YORK: THE MACMILLAN COMPANY
1902

All rights reserved

Trans to
Am. Lib
4/26/46

TRANSLATOR'S PREFACE

THE book, of which a translation appears in the following pages, is the first of the two volumes in which the second (revised) edition of Dr. N. G. PIERSON'S classical Treatise on Economics has appeared.¹ The plan of the work, as explained on pp. 36-43 of the introductory chapter, involves an arrangement of the subject-matter under four general heads. Two of these are dealt with in the present volume, viz. VALUE IN EXCHANGE, and MONEY—Parts I. and II. respectively of the Treatise.

The second volume (now in course of translation) treats of PRODUCTION, which forms Part III., and THE REVENUE OF THE STATE, which forms Part IV. of the work. Only a few months have elapsed since the appearance of the revised edition of Part IV.

In agreeing to undertake the preparation of an English version of this standard work, the translator was influenced by the words with which Professor EDGEWORTH concluded an appreciative review of Part I. of the second volume in the *Economic Journal* ;² but still more by the author's reputation

¹ *Leerboek der Staathuishoudkunde*, door Mr. N. G. PIERSON. *Tweede, herziene druk* (Haarlem, D. Erven F. Bohn, 1896-1902).

² Vol. vii. p. 582. Professor Edgeworth concludes his review as follows: "We still cherish the hope that the work in its entirety will be made accessible to the English reader by being translated into some language more generally familiar than Dutch. There is a quality in the work which is probably demanded by our public more than much of the home-made article.

"*The Times* no doubt expressed a national sentiment when, reflecting upon WALKER'S death, their leader-writer said that he resembled the older classical economists, who kept in touch with practical life and had no idea of making their science a collection of refinements remote from the business of the world.

"That combination of the man of affairs and the professional economist, which has become uncommon in England, is to be found in the Prime Minister of Holland."

as a writer who has the singular gift of being able to dispense with words of erudition in explaining the theories of economics.

Dr. PIERSON'S familiarity with our language, and his kindness in revising the proof-sheets, have saved him from much of the injustice which an author is sure to suffer at the hands of his translator. Consequently it is hoped that in the present case the injustice may be merely negative—such as must arise from differences of idiom, which make it impossible for a translator to reproduce the simplicity and elegance of diction which characterise his original.

Owing to the limited amount of leisure at the translator's disposal, the time that has passed since the publication of the Dutch volume has been unavoidably long. Where, however, important legislative or other changes affecting matters discussed in the book have occurred in the interval, reference to the fact will be found in an Appendix consisting of notes, many of which have been specially prepared by the author with the object of bringing the book up to date.

The translator is greatly indebted to Mr. C. P. SANGER of Lincoln's Inn for his kindness in reading and criticising the proof-sheets, and to Professor EDGEWORTH for advising him on a number of points which arose in the course of the work.

A. A. W.

LONDON, *August* 1902.

CONTENTS

INTRODUCTION

	PAGES
§ 1. Economics, Economic Politics, Social Politics	1-9

The maintenance of a rigid distinction between theoretical economics and economic politics has been considered necessary by RAU and others, 2. The need for such distinction is less than it appears, 2. No clear boundary line can be drawn between explaining and prescribing economic rules, 3. But it can be drawn between economics and social politics, 4. The precepts of economic politics are nothing more than a recapitulation of conclusions arrived at, 5. The object of the study of economics is to throw light on questions of a practical nature, 6, 7. But this science does not teach us *all* the rules to be observed for promoting the general welfare; there are personal, natural, and social factors in welfare, besides those investigated by economics, 7-9.

§ 2. Economics and Exchange	9-15
---------------------------------------	------

The nature of economic inquiry is seen from ADAM SMITH's brief *résumé* of the general requisites for material welfare; he makes no allusion to exchange, 10, 11. His statements apply to a communistic society, 11, 12. Owing to this, they sound more plausible than they otherwise would, 13, 14. It is in exchange that all the theoretical difficulties in relation to material welfare originate, and it is the function of economics to solve these difficulties, 14, 15.

§ 3. Economic Laws	15-22
------------------------------	-------

Economic laws bear upon commercial transactions, 16. Motives and nature of these transactions, 16, 17. MARSHALL's definition of economic laws is correct, but incomplete, 18, 19. Every economic demonstration deals to a great extent with the creation, transformation, or disappearance of interests connected with exchange, 20, 21. The use of geometrical figures may increase our knowledge of these interests, 22.

	PAGES
§ 4. Difficulties encountered in tracing Economic Laws	22-33

All interests not equally obvious and certain, 23, 24. The ability and the incentive to promote or safeguard an interest may be lacking, 24. Some people wrongly argue from this that economic laws only apply under conditions that are never quite fulfilled, 25, 26. It is possible in many cases to predict a course of action with certainty, 27. Or to predict it approximately, or as one that will be pursued, in a certain stage of civilisation, 28, 29. Or, as one that will be pursued "in the long-run," 29. Or without entering into particulars as to what will result from the performance of the action predicted, 30. Or, again, a limited number of possible courses of action may be predicted, 30, 31. THOROLD ROGERS erred in his disparagement of the practice of searching after *tendencies*, 32.

§ 5. The Method of Economics	33-36
---	--------------

Deduction the only method by which successful results can be obtained, 33. The *inductive* method necessitates precautionary measures, which are impossible in the domain of economics, 34, 35.

§ 6. Plan of this Work	36-43
---	--------------

A treatise on economics should begin by explaining exchange and value in exchange, 37. One of the few to understand this was CHARLES GIDE, 38, 39. GIDE's further arrangement of the subject critically examined, 40. There is no such thing as a theory of consumption in the sense of a branch of economics, 42, 43.

PART I

VALUE IN EXCHANGE

CHAPTER I

THE ORIGIN OF VALUE IN EXCHANGE

PAGES

§ 1. Economic and Non-Economic Goods 47-50

Only those things are goods which can serve directly or indirectly to supply wants, 47. Goods classified from the point of view of their available quantities in relation to the demand which those quantities have to satisfy ; explanation of the word "demand" as used in this connection, 48. Economic goods are those of which the supply does not exceed this demand, 49. The distinction between economic and non-economic goods does not coincide with that between manufactured products and gifts of nature, 50.

§ 2. Value irrespective of Exchange 51-53

Only economic goods possess *value*, 51. JEVONS wrongly suggests substituting the expression *Ratio of Exchange* for *Value*, 51, 52. Value represents the importance which we attach to things, having regard to their class or their quantity, 52, 53.

§ 3. Causes which determine Value 54-61

Not invariably and necessarily, but in most cases, the utility of each successive increment to a given stock is less than that of the preceding increment, 54, 55. And a still greater difference is manifested in the values which various persons attach to the same thing, 56. The utility of the last increment, *i.e.* the "final utility" or "marginal utility," regulates the value of a given quantity of a commodity, 57, 58. Thus the value of a quantity of goods is no measure of the utility which those goods as a class possess for us, 58, 59. We now know why the value of things diminishes as this quantity increases, 60, 61.

§ 4. Value and Cost Price 61-66

Cost price is the sum of the sacrifices which we make in order to obtain a thing, 61. These sacrifices must not be confounded with the *entrepreneur's* disbursements in respect of wages, etc., 61-63. The real cost price is the effort of production, 64. Though value is the reverse of cost price, the relation of value between commodities corresponds approximately to the relation between their respective labour costs, 65, 66.

§ 5. Value in Exchange 67-72

The origin of exchange, 67. As a rule both parties to an exchange benefit thereby, because of the different value which each attaches to a given quantity of the same commodity, 68. By reducing the price we increase the advantage of exchanging, 69. Owing to exchange, things possess an *indirect* as well as a *direct* value for us; exchange influences our valuations of things, 70, 71.

§ 6. Causes which determine Value in Exchange 72-75

In the case of any given supply in the market, the value in exchange depends upon the smallest marginal utility which the article possesses for any of the people who are to be its purchasers in the event of its finding a sale, 72. But the value in exchange is also influenced by the importance which those people attach to what they themselves must give in exchange, 73. Consequently, increase in the available supply of a thing affects the value in exchange, much more than it does the direct value of that thing, 74. Effect of price on demand, 75.

§ 7. Value in Exchange and the Distribution of Income 76-78

In explaining value in exchange, we at the same time explain the terms on which income is distributed, 76. For services as well as commodities have value in exchange, 77, 78.

CHAPTER II

THE RENT OF LAND

§ 1. Source and Nature of the Rent of Land 79-83

House rent frequently embodied in rent of land, 79. Difference between the rent actually paid and the full competitive rent, 80. Why CAREY is wrong in maintaining that the rent of land is entirely due to the useful properties conferred upon the land by labour, 81. And why those too are wrong, who maintain that such rental value as the land acquires in virtue of the labour applied to it is simply interest on capital, 82. Net and gross rental value, 83.

§ 2. General Causes which determine the Magnitude of Rent : Ricardo's Theory 84-87

RICARDO's explanation of rent, 84. Effect of unequal fertility, 85. The law of diminishing returns, 85. Effect of differences in situation, 86.

§ 3. Objections urged against the Ricardian Theory of Rent 87-92

CAREY's objections and Professor GREVEN's answer, 87, 88. But the very worst land under cultivation yields some rent, it is urged ; MILL's answer to this objection, 89. It has been urged that if RICARDO's theory were true, rent must have constantly risen ; the answer to this objection, 90. Nor is RICARDO's theory disproved by the fall in the price of corn, 91. The answer to MENGER's objection, 92.

§ 4. Agricultural Rent and the Prices of Agricultural Produce 93-99

Rent has no effect upon prices, 93. For a rise or a fall in the price of an article can only be brought about by either (1) a change in the "schedule of prices," or (2) a change in the quantity offered for sale, 94, 95. And neither the schedule of prices nor the quantity offered for sale is influenced in any way by rent, 95, 96. Objections to this proposition answered, 97. The principal rôle of rent, wages, and interest in the sphere of production is to create an incentive for ascertaining what objects it will pay best to produce, 98, 99.

§ 5. Agricultural Rent and Taxation 99-107

Taxes payable by the tenant have a depressing effect on rent, 100-103. A tax on land has no effect on rent, 103-105. Unless it should operate as a check upon the improvement of the land, 106. Which it certainly would do if it were raised too high ; it would then make it unprofitable even to maintain the existing quality of the land, 107.

§ 6. Improved Methods of Cultivation. Reduction of Cost of Transport. Increase of Population 107-120

The manner in which improved methods of cultivation affect the rent of land is different, according to whether the area over which the improvements extend is small or very large, 108. MILL's error on this point, 109. When applied over a very large area the improvements set two causes in operation, one of which exercises a favourable, the other an unfavourable influence on rent, 110. Critical examination of RICARDO's assumption that the unfavourable influence preponderates, 111, 112. But even though this unfavourable influence should exist, there still remains an incentive for landowners to adopt improved methods, 113. Reduction of the cost of transport also operates both favourably and unfavourably upon rent, 114. It causes land in remote regions to yield rent, but reduces rents elsewhere, 115, 116.

Failures of the corn crop do not affect prices of corn to the same extent now that they did formerly, 117. Increase of population causes the rent of land to rise, 118, 119.

§ 7. The Course of Rents 120-126

Rents in former centuries, 120. Rents in the course of the nineteenth century, 121-123. The rise in rents has been succeeded in recent times by a decline, 124. But the causes which tend to raise rents have not grown weaker, 125. Great progress will have to be made in agriculture before anything like a considerable increase can take place in rents yielded by ordinary land; such an increase can never be brought about by a rise in the prices of agricultural produce, 126.

CHAPTER III

THE RENT OF HOUSES

§ 1. House Rent and the Demand for House Room . . . 127-134

Causes of inequality in the demand for dwelling accommodation; disparity of wealth, 128, 129. Unequal estimation of the advantages of a good dwelling, 130. Thus the rents asked affect the demand for dwellings, 131, 132. They are subject to the law of marginal utility, 133. This also applies to the rent of shops, 134.

§ 2. Ground Rent 134-142

Rent of houses often composed of ground rent as well as house rent, 135. The proportion of ground rent included in house rents in Berlin, 40 per cent. on an average, 135. Origin of ground rent; it is the result and not the cause of high house rent; and is akin to agricultural rent, 136, 137. Why prices of building land—and therefore ground rents—are sometimes erroneously supposed to influence house rents, 137, 138. Speculation in building land only impedes the *immediate* supply of such land, 138, 139. The ground rent may become latent for a time, 139. Places may be classed in four groups. There is no ground rent in the rents of houses in places of the first group, owing to abundance of building land; nor in those of the second group, owing to decline of prosperity; in places of the third group, ground rent is included in the rents of some; and in those of the fourth group, in the rents of all the houses, 140-142.

§ 3. How are House Rents affected by Increase of Income? 142-146

In places of the first group, increase of income has no effect on house rents, but all the more effect on the growth of the population, 142. In places of the second group it causes house rents to rise, and for that very reason reduces the rate of increase of the population, 143. In

places of the third and fourth groups it causes ground rents to go up, 143. Increase of house rents in Paris, 144. Excessive concentration of people in certain places, 145. Concluding proposition, 145. ROSCHER on the growth of towns, 146.

§ 4. How do Changes in the Cost of Building and the Rate of Interest affect House Rents ? 146-151

Scarcely at all in places of the second and fourth groups, 146. But very strongly in places of the first group, 147. Their effect in places of the third group must be judged by the manner in which they operate at the "marginal point," 148, 149. Explanation and limitation of this theory, 149, 150. Our conclusions summarised, 151.

§ 5. How do Taxes levied on Houses and borne by the Owners affect House Rents ? 151-156

In the case of an *ad valorem* tax on the gross rents the effect is the same as if a proportionate rise in the cost of building or the rate of interest had taken place, 152, 154. Such taxes, therefore, affect the ground rent to some extent, 154. Dutch fiscal legislation regarding the taxation of real property ; importance of temporary exemptions from tax, 155.

§ 6. How do Personal Taxes borne by Occupiers of Houses in their Capacity of Occupiers affect House Rents ? 156-167

Such taxes, though borne by the occupiers, may have an effect on the gross rents of houses, 156, 157. This has been clearly proved by experience, 158. But the effect is not everywhere the same, and in places of the first group it is only temporary, 159. It is very marked, however, in places of the second and fourth groups, 160, 161. In those of the third group the burden of such a tax falls upon the owner of the house in so far as it is based on that portion of the rent which consists of ground rent, 162, 163. This law does not operate with mathematical precision, 165. Effect of partial exemptions (*e.g.* of shops) from tax, 165, 167.

§ 7. Measures for the Improvement of Housing Conditions 167-175

Existing defects in housing conditions of the people, 168. It is a mistake to suppose that the provision of cheap dwellings would suffice to remedy these defects, 169, 170. Which are due not to the dearness of dwellings, but to a low standard of living, 170, 171. The three best remedies consist in (a) the condemnation of houses unfit or unsuitable for dwelling accommodation ; (b) the framing of stringent rules for the construction of new dwellings ; and (c) limitation of the number of persons whom it shall be lawful to house in a given cubic space, 171, 172. Schemes whereby the State or Municipality advances capital for the construction of workmen's dwellings are not to be condemned unconditionally, 171. The scheme adopted in Amsterdam, for instance, 172, 173. But such schemes will in

most cases be unnecessary if the advice given above be followed, 173. Private philanthropy should aim at *substituting* good for bad dwellings, 174. The aim should be to render bad dwellings no longer obtainable, 175.

CHAPTER IV

INTEREST ON CAPITAL

§ 1. Property, Capital, Stock for Consumption. 176-179

The word "capital" is used in too wide a sense in everyday language, 176.

Land is not capital; neither are intelligence and skill: there is no such thing as "immaterial" capital, 177. Difference between capital and stock for consumption, 178. The same goods may be capital at one time and stock for consumption at another, or *vice versa*: what is meant by *Nutz-Kapitalien*, 179.

§ 2. Fixed and Circulating Capital 179-184

Fixed capital fulfils its purpose by being converted, circulating capital by *not* being converted, into stock for consumption, 179, 180. Owners of fixed capital preserve the value of their property by the process of "writing off," and by repair and maintenance, 181. Owners of circulating capital, by demanding an equivalent out of stock for consumption, 181, 182. No equivalent is given—but only bonds—when a Government contracts a loan to defray the cost of a war, or to cover a deficit in its ordinary expenditure, 183. How capital is destroyed in such a case, 184.

§ 3. The Creation of Capital 184-191

Capital is created whenever the capital group receives new products without being obliged to give an equivalent in return for those products, 184, 185. Exchange alone obscures our view of the process, 185, 186. Growth of capital is not necessarily, or even usually, increase of the supply of money, 187. It may even coincide with a decrease in the supply of money, 187. LASALLE'S theory of "*conjuncture*" refuted, 188, 190.

§ 4. The Credit Market 191-200

The most usual way of advancing capital consists in selling on credit, 191. But this way is not always practicable, 192. Recourse must then be had to the "money market" as an intermediary, 193. Illustrations of the manner of this intervention: three cases, 193, 197. So-called scarcity of money in the money market is in most cases scarcity of capital, 198. But it may also be scarcity of currency, 199. "Black Friday" (11th May 1866) in London furnishes an example of this, 200.

§ 5. The Origin of Interest on Capital 200-209

Interest must not be confounded with rent, 200. Interest is a premium on present as against future things. VON BÖHM-BAWERK's theory, 201. That premium indicates a difference in value between present and future things, 202. Certain objections against VON BÖHM-BAWERK's theory refuted, 203. Socialists generally disregard the difference in value between present and future goods, 204, 205. It is wrong to represent capital as feeding and maintaining the workmen while they are engaged on their labour, 206. The premium on present goods explained ; heavy demands may have to be met in the present ; the exigencies of commerce, 207. All production takes time, 207. What VON BÖHM-BAWERK calls "roundabout production" is frequently advantageous,—and capital is relatively scarce, being in fact one of the category of "economic goods," 208, 209.

§ 6. Causes of High and Low Rates of Interest 209-217

Part of the social income from which the capitalist draws his interest, 209. The rate of interest is regulated by the law of marginal utility, 210. The premium on present goods depends to some extent on the quantity of such goods available, 211. New capital is in most cases circulating capital, and the demand for this kind of capital is not unlimited, 212. Growth of population strengthens the demand for capital, 213. It is not true that interest has a "natural tendency" to fall, 213, 214. Causes which have the effect of rendering more productive the joint efforts of capital and labour are not always immediately advantageous to both ; the result may be a rise in the rate of interest ; or it may be a rise in wages. Circumstances on which it will depend whether the benefit shall accrue to capital or to labour, 215, 216. Barriers to international trade are detrimental to interest, 216, 217. Effect of improved means of transport on the rate of interest—at first a fall but ultimately a rise in that rate, 217.

§ 7. Demand and Supply of Capital equalised by Changes in the Rates of Interest and Wages 218-225

The word *interest* must now be considered in a more extended sense, *i.e.*, not only in the sense of payment made for the *loan* of capital, but also of income yielded by the *employment* of capital, 218. Interest is included in the prices of all goods, from the production of which normal or more than normal incomes are obtained, 218, 219. Wages and interest are the only elements composing the prices of products obtained on the "economic margin" of production, 219. RICARDO's explanation of the manner in which prices are influenced by the rate of interest. His theory worked out in figures, 220-223. The connection between wages, interest, and prices is a safeguard against the "exploitation" of labour by capital, 223, 224.

§ 8. The Interest for Short Credits 225-232

The rate of interest for long credits is not the same as that for short credits, 226. Causes of this difference, 226. Formerly, it was erroneously

believed that the stock of money exercised a predominant influence on the rate of interest ; that influence never lasts, 228. Rather is it by constant decrease of the stock of money, through the development of banking, that a depression in the rate of interest is brought about, 228. Critical examination of the more recent doctrine which asserts that the stock of money exercises a temporary influence on the rate of interest for short credits ; there is a want of clearness about this doctrine, 229. A temporary connection does exist between the stock of money (of all kinds) and the rate of interest for short credits ; but a decline in the rate of interest is just as likely to be the cause as it is to be the result of an increase in the stock of money, 230-232.

CHAPTER V

THE PROFITS OF ENTREPRENEURS

§ 1. The Services rendered by Entrepreneurs 233-237

The word "profit" has no fixed meaning in everyday language, 233. The function of the *entrepreneur*, 234. His risk, 235, 236. His services are labour attended with peculiar difficulties, 236, 237. His profit may be regarded as consisting of three parts, 237.

§ 2. The Compensation for Entrepreneurs' Risk 237-242

There is no clear line of demarcation between the humblest class of *entrepreneurs* and the workman class, 238, 239. There is a relation between the profits of small *entrepreneurs* and the wages of workmen in a given trade ; but profits must be somewhat greater than the wages with which they are compared, because of the risk incurred by *entrepreneurs*, 240, 241. This is true in a general way ; but nowadays compensation for risk does not amount to very much, 241, 242.

§ 3. Entrepreneurs' Wages 242-247

The demand for the services of *entrepreneurs* ; causes which determine such demand, 242, 243. The supply of *entrepreneurs'* services depends upon the result of the comparison which *entrepreneurs* and wage-earners make between profits and wages, 244, 245. A distinction must be made between profit realised in a given period of time and profit on a given article ; the latter may be great while the former is small, 246, 247.

§ 4. Entrepreneurs' Surplus 248-255

Many profits contain *entrepreneurs'* surplus (sometimes called *entrepreneurs'* rent), 248. This is due to the fact that the circumstances under which work is performed are not the same for all *entrepreneurs*, 249. This surplus has frequently been likened to the rent of land, 249.

Its importance from a social point of view, 250. Is it conceivable that, in a given branch of industry, every *entrepreneur* will secure surplus? Only in exceptional circumstances, 252. It is possible in the absence of competition, 252. *Entrepreneurs'* surplus, like rent of land, admits of being capitalised, 253. It frequently has its origin in industry and foresight, 254. Like the rent of land, it has no influence on the prices of goods, 255.

CHAPTER VI

THE WAGES OF LABOUR

§ 1. General Laws which determine Wages 256-264

The labourer derives his income from the same source as the capitalist, 256. The wages of labour cannot exceed, and must in fact fall short of the maximum advantage which the labour procures for the *entrepreneur*, 257. They must fall to the point at which there will be demand for all labour seeking employment, 257. Connection between wages and interest, 258, 259. Labour is not wholly excluded from a share in the special gains arising out of favourable conditions of production; force of public opinion, 259, 260. These special gains, moreover, stimulate *entrepreneurs* and thus produce a more favourable state of things for the labourers, 260. Through the wage system the labourer enjoys freedom from the risk of loss, 260, 261. Man is no more at the mercy of economic laws than he is at the mercy of physical laws, 262, 263. *Résumé* of the wages theory; its correctness verified by experience, 263, 264.

§ 2. Wages and Strikes 264-276

THORNTON'S theory, that wages of labour depend upon the strength of the organisation of labour, 264. Increase of wages may bring about increased productivity of labour by stimulating the ingenuity of the *entrepreneur*, 265, 266. Strikes may hasten the advent of an increase of wages in a prospering industry, 266. And artificial limitation of the supply of labour in certain trades may cause wages to be higher in those trades than would otherwise be possible, 267. The strength of the English Trade Unions is due to their artificially limiting the supply of labour, 268. But if wages are forced up to a higher figure than that at which there is equilibrium between supply and demand in the labour market, an increase takes place in the number of unemployed, 269. The fact that "labour will not keep" (as THORNTON says) does not prove the contrary, 270. If THORNTON'S theory be correct, then the wages earned by *entrepreneurs* must be unduly high, 271. Fallacy of supposing that if the workpeople in a trade are not organised their wages never rise, 271, 272. Or that a permanent increase of wages by means of strikes is possible, whenever the increase

is general throughout the trade in which the strikes take place, 272, 273. Extent of the influence of wages on prices, 273, 274. The answer to BRENTANO's argument, 274, 275.

§ 3. Wages and Expenditure 276-288

Current view as to the way in which expenditure affects wages, 276. If this view were correct; many important economic theories would have to be revised, 277. Money is "brought among the people" by saving as well as by spending, 278. It is said that diminished expenditure results in diminished production, 279. This is true; expenditure does indirectly operate beneficially, 280. But the expenditure theory also teaches that expenditure stimulates production in the person who supplies the goods intended for consumption; it is the latter proposition to which we object, 280. The prosperity caused by the settlement of wealthy people in a place is engendered by the imported capital, 281. Still it cannot be denied that a country benefits by the visits of wealthy foreigners, *e.g.* Switzerland, 282, 283. The terms on which such a country trades with other countries are thereby rendered more favourable, 284. But in such cases capital benefits more than labour, 284. Criticism of MILL's theory that "demand for commodities is not demand for labour," 284, 285. A reduction in the demand for particular articles always produces disturbance, 285, 286. Criticism of SCHOENHOF's theory, 286, 287. Expenditure does not, on the whole, increase the demand for services of *entrepreneurs*, 288.

§ 4. Schemes for providing Employment 288-300

It is not always by charitable schemes that the evil of want of employment should be combated, 288, 289. Charity does most harm in an economic sense when it encroaches upon savings, 289. There is always plenty of scope for useful work on the part of philanthropy, 290. Cases in which relief works for the unemployed are necessary, 291, 292. In organising relief work intended for cases of *periodical* scarcity of employment, the kind of work to select is that which (in the commercial sense) is the most productive, 293. Certain fallacies on this subject refuted, 294, 295. Mankind lives on what it produces, 296, 297. The combination of relief work with other forms of philanthropy to be deprecated, 297. In organising relief work intended for cases of *exceptional* scarcity of employment, the work selected must be such as does not encroach on the domain of private industry, 298, 299.

§ 5. Reduction of Hours of Labour as a Remedy for Scarcity of Employment 300-305

This remedy is effective, if accompanied by a reduction of the daily earnings, 300, 301. Some argue that the reduction of earnings is not an essential condition, 302. Three mistakes in their argument, 302, 303. Ultimately the necessary reduction in daily earnings will amount to less than it did at first, 304.

§ 6. Machinery and Wages 305-314

The popular objections to machinery, 305. HENRY GEORGE's contention that the introduction of labour-saving machinery has "never brought any advantage to the workers," 306. This contention is disproved by experience, 307, 308. But it is wrong to contend that advantage to the workers accrues automatically from the introduction of machinery, 309, 310. This contention ignores the fact that it is only subject to the fulfilment of a certain condition, viz. the introduction of new capital, that the advantage spoken of can accrue, 311. As a matter of fact, this condition has always been fulfilled, but the joint-stock company does not help towards its fulfilment, 312. This condition must therefore be emphasised, 313. Reasons why the introduction of machinery caused greater distress in the past than it would be capable of producing in these days, 314.

§ 7. Work and Wages 315-331

Is the effect of increased efficiency on wages always and unconditionally favourable? 315. If the increased efficiency leads to a decline in the demand for labour, it makes capital redundant, and this capital must seek investment, 316. But there may be temporary disturbances of equilibrium, 317. Which may entail permanent hardship on certain individuals, 318. The danger of such disturbances of equilibrium becomes less as the number of branches of industry wherein the efficiency of labour is increased becomes greater, 319. The opposition to piece work is groundless, 320, 321. Wages are highest where the workpeople perform the greatest quantity and the best quality of work, 321, 322. Do wages influence the efficiency of labour? 323. Writers on this subject have been hasty in their judgment, the first to err in this respect being ADAM SMITH, 323-326. Professor MARSHALL's answer to the question, 327, 328. Here again the favourable effect is not produced automatically: the raising of wages must be accompanied by a raising of the standard of living, if it is to increase the efficiency of labour, 339. The wages question is many-sided, 330, 331.

§ 8. Inequality in Wages 332-340

The inequality in wages has already been partly explained, 332. The application of commercial principles in the remuneration of intellectual labour partially explains the inequality in the wages of such labour, and sometimes produces the most unsatisfactory results, 333. Sound judgment is not always brought to bear in the fixing of remuneration by public authorities, 334. Effects of this, 334, 335. In wages of manual labour there is less inequality than one would expect to find, 335, 336. Inequality in wages as between different localities is not wholly accounted for by differences in cost of housing and food: there are reasons which prevent labour and reasons which prevent capital from seeking the best market, 336-338. Among the causes which tend to remove inequality in wages as between different localities, migration stands first, 339, 340.

CHAPTER VII

ON PRICE

PAGES

§ 1. Introduction 341-343

When we ask, What regulates the price of goods? our question may have reference either (*a*) to the prices of things in relation to each other, or (*b*) to the purchasing power of money, 341. No useful general formula as to the causes which regulate (*a*) can be found, 342. Variety of these causes, 343.

§ 2. Monopoly Prices 344-347

The monopolist will often reduce his prices in order that his aggregate profits may not be reduced, 344. This safeguard against excessive dearness cannot always be depended upon; Sir ROWLAND HILL's mistake, 345. Having regard to this, it behoves public authorities to take certain precautions when granting privileges to private persons or corporations, 346. Prices of goods, the production of which requires the exercise of special qualifications, 346, 347.

**§ 3. Prices obtained by Persons producing the same
Article under the same Circumstances 347-351**

The prices of such goods will tend to be so regulated that the services rendered in the production of each article shall be recompensed at a rate which shall be normal in the place where the services have been rendered, 347, 348. It does not follow from this that the relation between the prices of things shall always coincide with that between their respective efforts of production, 349. Causes of difference in these relations.—A country may benefit greatly by exchange, even though the product which it gives should have cost more labour than the product which it receives in exchange, 350, 351.

**§ 4. The Prices of Goods produced under dissimilar
Circumstances 351-359**

Examples of dissimilarity in circumstances of production, 351, 352. Explanation and defence of RICARDO's proposition that the prices of such goods are regulated not by the less quantity of labour that will suffice for their production under circumstances highly favourable and exclusively enjoyed by those who have peculiar facilities of production, but by the greater quantity of labour necessarily bestowed on their production by those who produce them under the most unfavourable circumstances, 352, 353. RICARDO's theory is incomplete, however, for the price determines the demand, 354. Bearing this in mind, we arrive at the theory that, in the case of any given article, there is a price at which the quantity that could be sold and the quantity that could

be supplied shall equal each other ; this theory illustrated by means of a diagram, 355-357. Absolute equality between the two quantities is not always possible, however, 357. How increased demand may result in a reduction in the price of an article, 358. Causes which influence the supply schedule, 358. Causes which influence the demand schedule, 359.

§ 5. The Relative Prices of Goods capable of being used for the same Purpose 360-365

A fixed relation of utility brings about a fixed relation of prices between such goods, 360. This proposition may seem to, but does not really, conflict with the conclusions already arrived at as to the relative prices of goods, 361-363. Practical deductions to which it leads, 364.

§ 6. The Value of Money in different Countries 365-378

In a country which produces its own bullion the value of money is regulated by the same causes as that of any other article, 366. A fall in the value of money does not *cause* a rise in prices ; it is a rise in prices, 366, 367. Causes which regulate the value of money in countries which import their bullion ; theory and explanation of the *labour price*, 368, 370. As a rule, a high labour price indicates a favourable economic situation, factors which influence the labour price, 370-371. The value of money in any country is connected with the ratio of exchange between that country and the countries with which it carries on trade, 372. Changes in the wages of labour must take place in one of two forms : (1) the money wage may rise or fall, while the prices of goods required by the labourer remain the same ; or (2) the prices of those goods may rise or fall, while the money wage remains the same, 373. Economic laws which determine whether a change in wages shall assume the former or the latter form, 374-378.

§ 7. The Value of Money at different Periods — The Method of "Index Numbers" 378-384

How are we to find an arithmetical formula for accurately expressing a change in the general level of prices ? 378. Many hold that we must take into consideration the relative importance of each article, 379. The difficulty of doing so, 380. Index numbers, 380. These are useful as a means of enlightening us as to movements of the prices of different articles ; sometimes also as to the general course of prices, but as to the latter they do not enlighten us accurately, 382-384.

§ 8. Changes in Prices caused by Redundancy and Scarcity of Money 384-399

It is seldom clear, *prima facie*, that a change in prices is due to causes which reside in the money, 384, 385. The method of residues, 386, 387. The utmost care must be exercised in applying that method, 388.

And in verifying the results, 388. The *noticeable* effect on prices produced by increase of money has sometimes been very slight, 390. The reasons being that the world's stock of gold is very large, and that it must be regarded as including silver token coins performing the duty of gold, 391. Further reasons, 391. Relative constancy of prices in British India in spite of the depreciation of silver, is due to decline in gold prices of British Indian export articles, 393, 394. Purchasing power of money affected by the issue of paper money: error of supposing that only issues of *inconvertible* paper money affect the demand for gold and silver; all uncovered notes supplant bullion, whether they be convertible or not, 395. This proposition demonstrated by explaining a typical balance-sheet of a bank of issue, 396. Deposits differ from bank notes only in form, 397. Depreciation of paper money proves that such money has been issued to excess, 397. Arguments against the quantitative theory refuted, 398. Meaning of the expression, "sluggish circulation," as applied to money, 399.

PART II

MONEY

CHAPTER I

THE PRINCIPAL MONETARY SYSTEMS

PAGES

§ 1. Great Britain and British India 403-413

The word "pound," as applied to money, originally meant a pound-weight of pennies, 403. Debasement of the coinage in the Middle Ages and under Henry VIII. ; its reformation under Elizabeth, 404. The gold coinage. The Recoinage Act of 1696, 405. The guinea, fixed in the year of the Recoinage Act at 22 shillings, had to be reduced to 21 shillings in 1717, 405. Though gold continued to depreciate, the guinea was allowed to remain at 21 shillings. Then "GRESHAM'S LAW" asserted itself and silver was discarded, 406. "GRESHAM'S LAW" explained, 406, 407. Gold rose again, and would have been supplanted by silver but for an enactment of 1798. Regulation of the currency in 1816, 408. The British Colonies ; the British Indian currency, 409. The closing of the British Indian Mints to silver in 1893, 409. This measure has not achieved all it was meant to achieve, 410. Standard money and token money, 410, 411. Results of the closing of the British Indian Mint to silver, 412, 413.

§ 2. France and the Latin Union 414-423

The *livre*, like the English pound, has become a short expression for 20 pieces of money, 414. The debasement of the coinage has usually been effected in two ways : by increasing the face value of existing money of account, 414. And by reducing the weight and fineness of the coins without altering their face value, 415. High seigniorage in the Middle Ages, 415, 416. Genuine attempt to apply the double standard from 1803 to 1873, 416, 417. Beneficial effect of this

attempt during a period of increased production of gold, 418, 419. Leaning towards the gold standard; the Latin Union, 420, 421. Coinage of silver first limited, and in 1878 forbidden within the Union, 421-423.

§ 3. Germany and Austria-Hungary 423-428

The Convention of 1837, 423. Introduction of the gold standard in Germany, 424. Demonetisation of silver stopped, 424, 425. Importance of the German currency reform, 425, 426. The Austro-Hungarian currency, 426, 427. Its reform in 1892, 427, 428.

§ 4. Holland and her Colonies 428-442

The Dutch *pond* used to be another name for 30 *grooten*, 428. Debasement of the Dutch *pond* between 1336 and 1542. The silver *carolus* of 1542. Further debasement of money of account after the year 1542, 429. The Currency Law of 1694; the *guilder* of 200 *azen* or 148·3 grains of silver, 430. The Currency Law of 1816, 431. Defects of that law, 432. The weight of the *guilder* reduced in 1839 to 145·813 grains of silver, 433. Currency legislation of 1845 and 1847; the single silver standard introduced, 433. The Dutch Indian currency law of 1854, 434, 435. The Currency Commission of 1872 recommends the adoption of the gold standard, 436. The Government's proposal to that effect rejected by Parliament on March 2nd, 1874, 437. Temporary influx of silver, 437, 438. Law of June 6th, 1875, 438, 439. Depletion of the stock of gold in 1882-1883, 439. Laws of April 27th, 1884, regarding the demonetisation of silver and the issue of Government notes, 440-442.

§ 5. The United States of America 442-448

The silver and gold dollars of 1792, 442. The weight of the gold dollar reduced in 1834, 442. The Government notes declared unredeemable in 1862, 443. Coinage of silver prohibited in 1873. Resumed in 1878, the "BLAND Act," 444. The "SHERMAN Act," 444. Defects of this policy, 445. Its detrimental effects, 445, 446. The "SHERMAN Act" repealed, 447.

CHAPTER II

BANKING IN THE PRINCIPAL COUNTRIES

§ 1. Great Britain—The Bank of England before 1844 . . . 449-454

The various kinds of banks, 449. Establishment of the Bank of England in 1694. Law of 1708, 450. Mismanagement of the Bank during the

first years of its existence, 451. Its notes become inconvertible in 1797 and depreciate, 452. RICARDO's pamphlet of 1809. The "Bullion Report." The Bank resumes specie payments, 452, 453. Crisis of 1839. Necessity for legislation regarding the Bank, 453, 454.

§ 2. Currency Theory and Banking Principle 454-461

LORD OVERSTONE's currency theory, 454, 455. Its defects, 456, 457. Opposed by the adherents of the Banking Principle, who were right on some, but seriously wrong on other points of the controversy; they failed to see that a bank can control the relation between the amounts of covered and uncovered paper constituting its note circulation, 458, 459. In this respect the bank is not a mere instrument in the hands of the public, 460. Of the two schools, that of the Banking Principle erred the more dangerously, 461.

§ 3. The Bank Act of 1844 461-468

The "Peel Act" examined, 461. The Weekly Return of the Bank of England explained, 462, 463. What is meant by the "Reserve"; the "Reserve" gave out in 1847, 465, 466; also in 1857 and 1866. The Peel Act judged by its practical working, 466, 467. Establishment of the London and Westminster Bank; laws of 1833 and 1844 concerning private banks of issue, 467, 468.

§ 4. Joint-stock Banks 468-474

Some figures relating to the English banks of deposit, 468, 469. Usefulness of such banks, 469, 470. The Clearing Houses, 471. The Bill brokers, and the attitude of the Bank towards them, 471, 472. The English banking system critically examined; position which the Bank of England occupies in that system, 473, 474.

§ 5. The Scotch Banks : 475-479

The first bank—that of 1695—loses its monopoly as early as the year 1716, 475. The freedom which followed was abused; the "optional notes"; many banks fail, 476. Law of 1845; high state of development which banking has reached in Scotland, 476, 477. Amount of deposits large, while note circulation small; "cash credits," 477, 478.

§ 6. Banking in France 479-484

JOHN LAW's Bank; The *Caisse d'Escompte*, 479. Establishment of the *Banque de France* in 1800; the provincial banks amalgamated with the *Banque de France* in 1848: No legal provision as to the Reserve to be held against the notes; maximum *amount* of note issue fixed by law, 480. Limitation of amount of note issue a mistaken policy, 481.

Two faults to which central banks are prone, viz. : excessive subserviency to the interests of the Government, 482 ; and lack of zeal in the service of the public, 483. Strong development of the Bank of France in recent times, 483, 484.

§ 7. Banking in Germany 484-488

Resemblance between the Imperial Law of 1875 and the Peel Act, 484, 485. The system of *Indirecte Contingentirung*, 484. Defective provision as to the Reserve, 486, 487. The *Reichsbank* is primarily a bank for promoting transfer of money, and as such is very effective, 487, 488.

§ 8. Banking in Holland 488-505

The Bank of Amsterdam, established in 1609, fails to effect the object with which it was founded, 488, 489. Establishment of the Netherlands Bank in 1814, 490. Its slow development, 491. Causes of this slow development, 491, 492. Controversy of 1863 as to freedom in the matter of issuing notes, and observations concerning that controversy, 492, 494. The Law of December 22nd, 1863, did not require the Bank to pay any share of its profits to the State, 495. Purport of this law and manner in which its provisions were carried out, 495, 497. Effective provisions enacted with regard to the metallic reserve, 498. Law of August 7th, 1888, enlarges powers of Bank and requires it to pay a share of its profits to the State, 499, 500. Banks of deposit, 501. Credit Societies, 502. "General Banks," 503. So far as concerns the use of coined money, four stages can be discerned in the growth of nations, 504. The Netherlands Bank as an institution for facilitating remittance of money, 504, 505.

§ 9. Banking in Switzerland and the United States . 505-515

SWITZERLAND : No National Bank Law existed prior to 1881 ; banking developed very little before 1871, 505, 506. The *Concordat* of 1876 and the Law of 1881, 506, 507. That law proved unsatisfactory ; amendment, in 1891, of Article 39 of the Law of the Constitution, which forbade centralisation in banking, 508. Scheme for establishing a Federal (National) Bank subsequently introduced (but rejected by *Referendum* in 1897), 509, 510.

UNITED STATES OF AMERICA : Prior to 1863, banking legislation left entirely in the hands of the individual States, 510. A "United States Bank" was established in 1791, it is true, but failed in 1841, 510. Unsatisfactory condition of banking, 511. The "National Banks" : their privileges and duties, 511, 512. The condition of banking has improved, but is capable of further improvement, 513, 515.

CHAPTER III

BILLS OF EXCHANGE AND FOREIGN EXCHANGES

PAGES

§ 1. The Purpose of the Bill of Exchange . . . 516-525

What gives rise to the demand for bills of exchange? 516. The bill of exchange is a medium of payment, 517. Bill brokers and foreign bankers, 518. Arbitration of the exchanges, 519. The prices of bills (rates of foreign exchanges) influence supply of and demand for bills, 519, 520. By means of the bill of exchange, a country is enabled, without using any gold or silver, to export goods to countries from which it imports none, and to import goods from countries to which it exports none, 521, 522. The bill of exchange also a medium for procuring capital, 522, 525.

§ 2. Differences in Rates of Exchange as between Bills for Long and Bills for Short Terms . . . 525-529

Form in which rates of foreign exchanges are most usually quoted; this form of quotation observed in Holland, but not in England or the Dutch Indies, 525. The difference in the rate of exchange between long and short term bills can never exceed interest at the rate known to be current in the place where the bills have to be met, 527. But it may amount to less than such interest, 527. Though it can never fall far short of it, 527, 529.

§ 3. Limits of Fluctuation of Foreign Exchanges . . . 529-536

Between countries having the same monetary standard the limits of fluctuations are practically constant, 529, 530. Between countries having different monetary standards, they depend upon the ratio of value between gold and silver, 530, 532. Under the *étalon boiteux*, there is a fixed limit as regards the *fall*, but an uncertain limit as regards the *rise*, which may take place in the prices of bills on countries having the same monetary standard, 533, 534. This enables the reader to understand how the Law of April 27th, 1884, was intended to operate, 534, 535. The rates of foreign exchanges inform us as to the state of the balance of payments, 535. What is meant by the expressions "favourable balance of payments" and "unfavourable balance of payments," 535, 536.

§ 4. The Causes of Change in the Balance of Payments . . . 536-562

An unfavourable balance of payments is not the cause, it is simply another way of stating the fact, of bullion being exported, 536, 537. Gold and silver are not exported in order to "adjust a balance" or "close a balance of payments," 537. The contention that they are exported for that

purpose is based on a false theory, 538. It affords no explanation of the movements of bullion between different countries, to ascribe them to changes in the balance of payments, 539. What the Mercantile system consists in, 540, 541. There is a flavour of Mercantilism about Lord GOSCHEN's theory that the movements of the foreign exchanges show the direction in which capital is moving or about to move, 541. RICARDO's views on the subject are, on the whole, correct, but imperfect, 542-544. The causes of change in the balance of payment are :—

(a) *Changes in the relative value of gold and silver.* But we must distinguish here between a rise in the price of silver (as expressed in gold) due to scarcity of that metal itself, and a rise in the price of silver due to the redundancy of gold, 544-548. False conclusion that might be drawn, 548.

(b) *Increase or decrease in the demand for bullion, or in the supply of the same.* Such increase or decrease may occur : (I.) *in the country itself, where the balance of payments has changed*, and be due to change in the demand for money in that country, 548. Or to increase or decrease of the uncovered note circulation, while the country's demand for money remains the same, 549. What happens when a bank of issue raises or reduces its rate of interest, 550-552. An out-flow of bullion may be salutary, 553. Increase of uncovered note circulation does not always affect the balance of payments, 554. Increase or decrease in demand for bullion or in supply of same may also occur (II.) *abroad*, 554, 555.

(c) *Exceptional demand for remittance of capital to foreign countries, especially if such demand coincide with a condition of the banks compatible with an increase of their uncovered note circulation :* how such exceptional demand may originate, 555, 556. If there are no banks, or none capable of increasing their credit, then the bank rate of interest will rise considerably, and little bullion will be exported, 556-558. The converse will happen, if there be banks capable of meeting a heavy demand for credit, 558, 559. It is advisable for the bank to maintain a large reserve *surplus*, 558, 559.

(d) *Alterations in the ratio of exchange with foreign countries.* The ratio of exchange alters first ; then the balance of payments, 560. The case of British India in 1862-66. Why, when silver had become redundant owing to increased production and the closing of European mints, it was not *at once* exported in large quantities to British India, 561, 562.

§ 5. Conclusions to be drawn 562-567

- I. As a rule, the imports of a country will consist of goods or of goods and securities, even though that country should, like England, have large sums annually owing to it from abroad, in respect of interest, freights, etc., 562-564.
- II. High import duties impede exports. Such duties destroy just about as much native industry as they create, 564-567.

CHAPTER IV

THE REGULATION OF CURRENCIES

PAGES

§ 1. Fixity of Value between the Divisionary Money and the Full Legal Tender Money 568-572

Some technical terms explained, 568. The divisionary money should stand in a fixed relation of value to the full legal tender money, 569. How to prevent depreciation or appreciation of the divisionary money in relation to the rest of the currency, 570, 571. This would be very difficult in countries where civilisation was still in a backward condition if the single gold standard were in operation there, 571, 572.

§ 2. Fixity of Value between the Coins constituting the Full Legal Tender Money—The Single and the Double Standard 572-581

With the single standard this fixity comes spontaneously, 573. Under the double standard applied to a small area it is unattainable, 573, 574. Would it also be unattainable under the double standard applied to a very extensive area? 574. Those who hold that it would, forget GRESHAM'S Law, 574-576. They also forget that legislation can exercise an influence on supply and demand for bullion, 577. An international agreement to introduce the double standard is not a regulation of the ratio of value between gold and silver by treaty; it is the establishment of a condition of things that would impart fixity to that relation, 578. Some further objections answered, 579, 580. Under existing circumstances, however, international bimetallism is impossible, 581.

§ 3. Standard Money and Token Money 582-587

In a country where the currency consists of silver token coins as well as gold standard coins, the Bank should act as if its metallic reserve consisted entirely of gold, whenever it becomes necessary to export that metal in order to steady the foreign exchanges, 582, 583. But for this purpose some such law as the Dutch Act of April 27th, 1884, is needed. The duties of the Bank and the duties of the Government in relation to the currency are distinct and must not be confounded, 584. Course which a bank should pursue in respect of its stock of bills drawn on places abroad, 584, 585. It is reprehensible on the part of a bank to take advantage of the defective state of the currency in order to escape the necessity of raising its rate of interest, 585, 586. Advantages which have resulted from the principles applied in Holland, 586, 587.

§ 4. The Disadvantages of Excess or Scarcity of Currency 587-598

The proposition that a currency must possess fixity of value is not absolutely true, 587. It is a mistake to overlook its conditional nature, 588, 589. Those err, who maintain that the effects of redundancy of money are entirely beneficial. Redundancy of money produces depression as well as prosperity, and the same is true of scarcity of money, 590-592. Nor is it true that a rise in prices of foreign bills due to depreciation of the standard metal is productive of national welfare, 592, 593. Or that an excessive issue of paper money stimulates exports and checks imports, 593, 594. When money is redundant, imaginary profits are made, and when it is scarce, imaginary losses are sustained, 595. A country should select for its standard metal such metal as most civilised countries have selected for that purpose, 596. The introduction of international bimetallism would promote fixity of value of money, 597. The issue of inconvertible paper money on an extensive scale operates adversely to fixity of the value of money not only in the country of issue, but also in other countries, 598.

APPENDIX

NOTES 601-604

INTRODUCTION

§ 1

Economics, Economic Politics, and Social Politics¹

ECONOMICS may be described as the science which teaches us what rules mankind should observe in order to advance in material prosperity. Other definitions are to be found in books, but the one just given is current in daily life. As will subsequently appear, it is not a perfect definition. Yet it is not so defective as some persons hold it to be; and since we have taken upon ourselves the task of stating the scope of economics, we will begin by proving this.

Many persons are of opinion that a rigid distinction should be made between economics as a science and economics as an art; or, as it is usually expressed, between theoretical economics and economic politics. The German author, RAU, was one of the first to make this distinction. In his text-book of 1826, accepted for decades in Germany as the text-book *par excellence*, RAU divides "Politische Oekonomie" into two branches; the first he calls "Volkswirtschaftslehre," and the second "Volkswirtschaftspolitik." This division has found favour with many other writers, including MENGER the

¹ This is a literal rendering of the Dutch *Staathuishoudkunde*, *Economische Politiek en Sociale Politiek*. The most difficult term in it is *Politiek*, the German *Politik*. There is no word in common use in English which translates it exactly; but *Politics* is getting into use for the purpose, and it will be so used throughout the translation. It means the practical applications of a science. But these may be regarded either as constituting an *Applied Science*, that is, a body of knowledge arranged with reference to immediate practical uses, or as an *Art* or set of precepts.—A. A. W.

Austrian author, who adopts it in the very interesting work which he published in 1883 under the title of *Untersuchungen über die Methode der Socialwissenschaften*. We have to examine whether any grounds exist for maintaining this distinction of RAU's. It is essential that we should do this if we are to acquire a correct knowledge of the nature of economic problems.

At the first glance the distinction seems most desirable. Economics simply explains, economic politics prescribes rules. The former states what is, the latter what ought to be. The one is pure science; the other is applied science. How are wages determined under a system of free competition? We look to economics for an answer. Is it expedient that wages should be fixed by the Government? This question belongs to the domain of economic politics. Such questions differ generically, so that nothing but confusion can ensue if we mix them up—a confusion not quite, but to some extent, analogous to that which would arise if we were to neglect to distinguish between *jus constitutum* and *jus constituendum*.

If this be so, then the error of the current definition of economics lies in assigning to it the functions of economic politics, and leaving us in a state of uncertainty as to the object of economics itself.

But this would not be fair criticism. However worthy of respect RAU's distinction may be, on account of its age and the authority of the man who invented it, we shall find, when we have examined it more closely, that it cannot be maintained, and that it is, in any case, of little importance. Let there be no misunderstanding about the meaning of words. By economic politics we do not understand legislation involving a certain care for economic interests, but legislation exclusively directed to that aim though it may have the effect of promoting other interests as well. Take currency legislation as one example out of many. A sound currency legislation is necessary in the interests of exchange; it in turn protects debtors and creditors from loss. It also exerts an influence in other directions; in the domains of morality and statesmanship. This, however, is true of any measure intended to safeguard economic interests, and changes neither the character nor the tendency of the measure. The regulation of customs tariffs affords another

and a very telling example. When import duties are high, smuggling increases; bad moral effects therefore result from such duties. But bad political effects also result from them, for they produce ill-feeling abroad. The protectionist does not shut his eyes to this. He accepts the evil for the sake of the advantages which he expects to follow from high import duties as means for developing national industry. Thus the "economic politics" which he advocates fully merits the name; and it would be very misleading ever to use the expression in any other sense. It means legislation which has in view the furtherance of material welfare and nothing more. The legislator or administrator may, it is true, endeavour, by one and the same measure, to promote economic as well as other interests; but in that case his legislation is of a mixed character—it is economic, and something else besides.

When we limit the term in this way we see at once that no clear boundary-line can be drawn between explaining and prescribing economic rules—using the word rules in the sense not of absolute, but of conditional precepts—a term which will presently be explained. An advocate of the single monetary standard produces a strictly theoretical demonstration, in which he describes the effect of a double standard as follows: alternately, one or the other metal will become the measure of value, and always that metal, of which the production has increased too rapidly; repeated dislocations of commerce will ensue; the same dislocations will occur in banking, owing to the necessity for movements of metals, which the single standard would have obviated; a perpetual state of uncertainty will prevail in the money market; merchants will conclude their bargains, not in money but in gold, in order to secure themselves against loss. Our monometallist concludes his theoretical investigation with the statement, that the double standard has injurious results. Is there a wide gulf between a statement like this in the indicative mood and a statement in the imperative mood enjoining the use of one metal only as a standard?

An advocate of the doctrine of free trade will show how every restriction of imports causes a restriction of exports. He will point out that import duties on corn benefit the landowners

only, not the farmers, and that such duties have an injurious effect upon the national food supply. He will refute the assertion that protection may counteract scarcity of employment; in fact, he will show at every point that mischievous effects must follow from the adoption of the policy which he has been subjecting to a purely theoretical investigation. The moment comes when he must arrive at some conclusion. Is it material whether that conclusion takes the form of a statement, that protection is harmful, or of an injunction not to adopt protection?

The mistaken idea that it is desirable and even necessary to make a rigid distinction between economics and economic politics, arises from the fact that the latter term has generally been used in far too wide a sense. The necessity for doing this, however, exists no longer, now that a new term has come into vogue, which exactly expresses what often appears to have been meant by economic politics. The new term is *Social Politics*, which implies a system of politics having for its object the improvement of social conditions, the prevention of social abuses, irrespective of whether those conditions or abuses have to do with the material welfare of the people or not. There is every reason why a distinction should be maintained between problems of an economic nature and those of a socio-political nature, but not because social politics is an art and economics a science, for we see that frequently the deductions of the latter have only to be stated differently in order to become precepts of art. The distinction is necessary, owing to the fact that frequently socio-political questions are not primarily economic in character, and would, if introduced in that character, be seen in an entirely misleading light. For example, laws restricting child labour are not intended for the promotion of national wealth. There is, indeed, very good reason for believing that no country has suffered a decrease of national wealth through restricting child labour; but even though this were not the case, we should still be bound to approve of laws which prohibit the employment of children at too early an age, or at work which was beyond their capacity. Take, again, the important question of poor relief. Were we to treat this as one of the problems of economic politics, we should be taking too narrow a view of it, thus failing to recognise the variety

of the requirements which the poor law is called upon to fulfil. Unquestionably, economics may give us valuable advice on these subjects. For instance, it may point out the principles to be observed in such a matter as relief employment. But this is no adequate reason for labelling the question, how to organise a system of poor relief at once efficient and economical, as an economic one. It is a problem whose solution requires further knowledge than that which our science can afford.

Investigations bearing upon economic politics, in the true sense of the expression, have too close an affinity to theoretical questions to be capable of being distinguished from these. In fact, the two never exist apart. No author, however he may have arranged the heads of his subject, has explained the economic effects of systems of currency, of land tenure, or of commercial policy without embodying his conclusions in certain precepts. And why should he not do so, since these precepts never are, and never can be, anything but a recapitulation of the conclusions he has come to? To have forgotten this is the chief error of those whose views we are now opposing. Economics, they say, teaches us *what is*; economic politics, *what ought to be done*. What ought to be done? May the economist ever presume to dictate to the legislator what he ought to do? It is clear that the so-called precepts of economists can never go beyond something like the following: Assuming that the State is prepared to take for its guiding principle the material welfare of the people, it must adopt such or such a course of action. But no dictum of this kind can be justified without invoking some general economic law, and showing how that law will operate in a given set of circumstances. Everything will depend on the argument, and all else will be of secondary importance. Once it has been clearly proved, for example, that a curtailment of freedom of trade is prejudicial to wealth, it adds little to the strength of the proof to conclude it with a warning to the legislator that if he desires to safeguard material interests he must adopt free-trade principles. Rules are framed for the convenience of the reader, and in order to impress certain truths upon his mind. They constitute no part of the argument; they merely summarise it, and the precepts which they

embody are always of a *conditional* nature. The sense in which the word "conditional" is used here will, it is hoped, have been made clear by the foregoing.

If we have been right so far, then the popular definition of the function of economic science as that of teaching us the rules which mankind must observe in order to advance in material prosperity, is not so far wrong after all. This definition does not prevent our distinguishing between the rules to be observed by one *nation* in its competition with another, or by each *group* or section of a nation in its competition with other groups or sections of the same, and the rules to be observed *by the race as a whole*. Indeed, the ultimate object in view in the study of economic science is to throw light on economic questions of a practical nature; and in so far as the science has kept this ultimate object in view, its development, instead of being retarded, has acquired stimulus and nourishment by doing so. ADAM SMITH'S classical work, *An Enquiry into the Nature and Causes of the Wealth of Nations*, which appeared in 1776, and formed the starting-point of the newer political economy, is mainly an attack upon the system of protection in all its forms. MALTHUS' *Theory of Population*, the first edition of which appeared in 1798, is directed more especially against communism. Not many years later, when the English currency was in a state of great confusion, RICARDO wrote his celebrated treatise of 1809 on the depreciation of bank notes and the distribution of precious metals, a treatise which was imperfect in some of its conclusions, but was the first to show the true standpoint from which the subjects it dealt with ought to be regarded. After the end of the Napoleonic period, the condition of agriculture in Western Europe was greatly depressed, and there was a loud outcry for protective duties. Then it was that a stream of light was suddenly shed upon the causes of rent and its relation to the rates of wages and interest. It might almost be said that the history of agriculture, commerce, and industry in the nineteenth century is reflected in the history of economic science during the same period. Whenever pauperism increased, authors wrote about poor relief, trade unions, friendly societies, and co-operation. A rise or fall in the purchasing power of money brought the currency question to the front.

Marked fluctuations in the rate of interest brought up the banking question. Periods of trade crisis or depression led people to inquire into the true nature of that little understood phenomenon called over-production.

In throwing light upon questions of a practical nature or in indicating rules which mankind must observe in order to advance in material prosperity, the economist is not straying beyond the limits of his own domain; he is keeping well within them. The reader will not fail to notice, however, that we have now stated the popular definition of the functions of our science in a somewhat modified form. By showing the reasons which have made this necessary, we shall enable him to see what kind of knowledge is acquired with the aid of economic inquiry, and the real nature of such inquiry.

The function of economic science is said to consist in making known the rules to be observed for promoting the general welfare. *The rules, observe.* Here we have a mistake to begin with. Economic research can never make known all the rules that bear on the subject. The formula, in any case, needs amendment in the sense of omitting the definite article before the word "rules."

We must never forget that the welfare of a people is to a very great extent determined by the physical and moral qualities of that people, and that it cannot be the economist's business to make known the rules to be observed in order that these qualities may be developed. It is not for the economist to lay down the rules of health for mankind. It is not his business to ascertain the best systems of diet or of education, or to discover means for counteracting drunkenness. Some people would include within the scope of economic science everything connected with material welfare, however remote the connection might be. Let it be stated here once and for all, that no denial of the great value of the *personal* causes in material welfare is implied by the exclusion of such causes from the scope of economic inquiry.

The same course has to be adopted with regard to the *natural* causes, including climate, situation, and the fertility of the soil, and in fact all those external advantages upon the presence or absence of which the wealth or the poverty of many a country depends. We do not expect economic science

to teach us the rules which a people should apply in order that a river, which has proved to be an affliction, may be converted into a source of prosperity, or in order that refuse which pollutes the air may become the cause of more abundant crops. Neither does economic science inquire into the influence of climate or soil upon human inventiveness. Such an inquiry would be interesting, no doubt; but the fact that a subject possesses interest even from the point of view of wealth does not bring it within the range of economic science.

There are *social* as well as personal and natural causes of well-being. As a contributory cause of wealth or poverty in a nation nothing can be said to be immaterial. The moral and physical qualities of its people cannot be regarded as immaterial; neither can its natural resources or its laws. Good laws, incorruptible judges, and an efficient police are indispensable conditions of material welfare; is that any reason why economic science should teach us what provisions the law should contain so as to be effectual as a means of protecting property? At some points, undoubtedly, the studies of economic science and jurisprudence overlap. The domain of social life being common to both, it necessarily follows that there are questions of a juridico-economic nature, the mixed character of which is sometimes more readily grasped by the student of law than by the student of economics. It is a mistake, however, to assume the presence of economic elements in a juridical question simply because that question touches material interests. Where absolute certainty exists as to the direction in which the solution must be sought, with a view to the furtherance of those interests, the jurist has nothing to learn from economic science. In very many cases there can be no doubt whatever on the point. It then devolves upon the jurist to inquire whether his action should be dictated by regard for material interests or not, and if so, what *his own* branch of study can teach him as to the manner in which those interests may be promoted. A question cannot be said to be juridico-economic unless it demands special inquiry as to the course prescribed by a regard for material welfare. It is only then that the aid of economic science need be sought in solving the problem.

It follows then that the current definition of the function of our science is too wide. But it is faulty in another respect

as well. For, though it tells us in general terms of the object of economic inquiry, it tells us nothing as to the nature of such inquiry. Here we must digress a little.

§ 2

Economics and Exchange

The introduction to ADAM SMITH'S *Wealth of Nations* opens with the following passage: "The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations.

"According, therefore, as this produce, or what is purchased with it, bears a greater or smaller proportion to the number of those who are to consume it, the nation will be better or worse supplied with all the necessaries and conveniences for which it has occasion."

These words have generally been passed over without comment. The thoughts which they express appear to be no less simple than the language in which they are conveyed. Every people lives on the annual produce of its labour; part of that produce is consumed in the country and part exchanged for the produce of foreign countries. The fewer the people who have to subsist on the available supply of commodities, the larger the share of each individual. What objections could any one urge against these propositions? Upon a closer examination of the passage, however, the question cannot fail to arise, whether very many persons must not feel bound to disagree with them.

Can the advocates of a protectionist policy agree with them? Can they be subscribed to by opponents of MALTHUS, or by those who attach great importance to an abundance of money; or by those who believe in the possibility of general over-production; or by those who hold that labourers are as a whole benefited by a shortening of their hours of labour, when such a measure is attended by a corresponding diminution of output? It is very commonly believed that saving confers but

little benefit in comparison with expenditure. It is almost universally accepted that prisoners and persons out of work should not be employed upon work which enters into competition with private industry, and that, moreover, any work found for them should always be unproductive. How are we to reconcile all this with what ADAM SMITH has said? The annual labour of a people is the source of all its wealth. Then the more a people derives from that source, the more it benefits. Labour procures us commodities, and thus enables us to procure other commodities from abroad; we ought, therefore, to be glad to find other countries willing to exchange with us; to flood us, in fact, with their goods. If we could get their goods for nothing, all the better. When a given quantity of goods has to be distributed, the smaller the number of people, the larger the share of each person. Increase of population, therefore, cannot be advantageous when it causes production to be carried on under less favourable conditions—*e.g.*, on soil which is less fertile or less conveniently situated, or under conditions which necessitate a larger outlay of capital.

We have done no violence to our author's words. They imply all that has just been said and much more that is denied every day in practice. How strange, then, that they should never have been contradicted? They include, within a small compass, the whole system of ADAM SMITH and his school; a system every part of which has produced, and continues daily to produce, vehement discussion. One would have thought that these were the very words against which attacks would have been directed. Instead of this, they have usually been passed over, and the numerous and far-reaching theories which they involve have somehow remained unnoticed.

This strikes one at first sight as very remarkable; yet the explanation is very simple. In the passage quoted nothing is said about exchange; in fact, the attention of the reader is drawn away from the subject. ADAM SMITH may be said to have fused all individual interests into one great national interest. He has nothing to say about *entrepreneurs* and labourers, landowners and tenants, buyers and sellers. The nation's income is treated as a unit, as the fruit of the nation's labour. Of the joint produce, part goes abroad in exchange for such "necessaries and conveniences of life" as may be considered more useful than

those produced at home, and part is consumed within the country. About distribution our author speaks only in such terms as are calculated once more to draw the mind away from the subject of exchange. The income of each individual is a quotient; the larger the number of mouths to feed, the smaller the share allotted to each. In short, ADAM SMITH expresses himself here in a way that has the effect of throwing into the background everything that is characteristic of society as at present constituted, everything that distinguishes it clearly from a society of communists. Owing to this, his words sound more plausible than they otherwise would, and he manages to procure acceptance for doctrines that cannot consistently be endorsed by any mercantilist or protectionist or advocate of the old theory of population, or by anybody who believes in the possibility of general over-production, and would therefore recommend restriction of output.

What ADAM SMITH says would undoubtedly be true in a communistic State.

Suppose two such States to exchange annually 6,000,000 quarters of wheat and 4,000,000 tons of iron. Presently the country supplying the wheat announces that, in future, it will give 10,000,000 instead of 6,000,000 quarters in exchange for the 4,000,000 tons of iron. What objection can the iron-producing country have to such a proposal? It knows that the advantage of its commerce lies in importing and not in exporting.

Or, again, a communistic State consists of 20,000,000 persons. The population increases annually by 200,000, owing to immigration and the excess of births over deaths. Should this increase be regarded as an advantage or the reverse? In order to answer this question it would be necessary, in the first place, to ascertain to what extent production was being increased owing to a larger number of persons taking part in it. Then it would be necessary to ascertain the quantity of materials and necessities of life consumed, while labour was being applied in the erection of houses to accommodate the extra 200,000; of workshops, in which they should labour, and of warehouses for the storage of the articles which they would produce; of schools in which their children might be educated; finally, in making the canals, roads, and means of transport, and

in bringing into cultivation the extra land needed owing to the extension of the area of labour. By comparing these and similar data it would be possible to obtain a correct answer to the question, whether a population of 20,200,000 would enjoy greater prosperity than a population of 20,000,000; whether 20,400,000 will be better off than 20,200,000, and so on. Everybody would see at once that the probability of an increase of population leading to a fall instead of a rise in the standard of comfort would become greater, according as it became necessary to resort to less fertile and less favourably situated land, to exchange under less favourable conditions with other nations, to establish the more costly institutions required by more densely peopled countries; or, according as it became more difficult to proceed further in the division of labour owing to the advance already made in this direction. Under no circumstances would increase of population *per se* be regarded as a cause of increased wealth.

Suppose that in a community of the kind described the hours of labour were very long; that they were proved to be unnecessarily long because, with a shorter working day, greater speed would be developed and production remain undiminished. A ready ear would be lent to those who argued in such a manner. Evidence would be sought in order to prove whether their statements were true. But were the evidence to point to the contrary conclusion, we should not find any one proclaiming that the material welfare of the masses would, for that very reason, be promoted by reducing the hours of labour. The disadvantages of such a measure from the point of view of material welfare would be admitted, and the question would arise, whether, possibly, some reason might not exist for submitting to them; or else inquiries would be instituted as to whether it might not be possible to remove them by adopting improved machinery; nor, it may be added, would any one believe that the adoption of improved machinery would be detrimental to the public weal.

Many things of interest from an economic point of view would be noticeable in a communistic State; and, were such a State to exist, it would be well worth while to study it attentively. We should want to find out, for example, whether the governing body was capable of performing its manifold

duties ; whether it had taken due measures for ensuring the accumulation of capital—as no form of society can dispense with capital ; whether it regulated production according to demand ; whether it adopted the latest inventions ; whether it succeeded in preventing waste of time and energy, and neglect and dishonesty on the part of workmen and overseers. We should note whether the population had not increased beyond due limits owing to the absence of those causes which, in the existing state of society, still act more or less as checks upon early marriages and the rearing of large families. But with a little reflection it would not take long to ascertain the rules which a State of this kind would have to observe in order that it might enjoy such a measure of material welfare as it was capable of attaining. The rules might be reduced, perhaps, to six or seven. There would be no room for differences of opinion as to the rules themselves, though differences might arise as to their application. Communists contend that in such a society there would be no “Social Question.” The contention is literally true ; there would be no social question any more than there would be a currency question, because the conditions for producing these questions would be wanting.

Why is it otherwise in actual society ? How is it that, in our case, so many reasons exist for doubt in respect to matters which, in their case, no one would think of disputing ? The causes may be summed up in the one word, Exchange, which implies everything that exercises an influence in this matter : the division of society into economic groups of capitalists, labourers, landowners, and tenant farmers ; the institution of private property ; competition ; the regulation of production entirely by *entrepreneurs* and according to their views ; the distribution of income according to the value of each person's services. In a communistic State all interests would be one. Exchange begets conflict no less than harmony of interests, and careful consideration is in most cases necessary in order to determine where the conflict begins and the harmony ends. In a communistic State any appliance that enabled an industry to be carried on with better results would necessarily be a benefit to the whole community. Nobody would have reason to complain, even though the result should be that less labour was required in that industry.

The labour which had been displaced could be employed for other purposes, or it might even remain unutilised for a while. For, under a system of distribution based upon communism, being unemployed would not necessarily mean having no income. All this would be perfectly obvious. Nobody, however, can say that all this is obvious under the existing social order.

Great as are the services which ADAM SMITH has rendered to economic science, they would have been greater still had the passages which we have quoted from the introduction to his book been presented, not as axioms, but as conclusions to be drawn from his inquiry. Some such words as the following should have been added by the author: "What has here been said applies to a society in which there is no exchange; nevertheless, exchange produces no modification of any importance in the main requisites for material welfare; the chief object of my work is to make this clear." Any attentive reader of *The Wealth of Nations* will see that these words would be a fair expression of what was in the author's mind. Before ADAM SMITH had reached the end of the chapter in which he shows the technical advantages of division of labour, he knew quite well that his reasoning was defective in one very important particular; and he, therefore, proceeded by a lucid, if somewhat condensed argument, to anticipate the objection that, under existing social conditions, technical advantages do not necessarily mean economic advantages. Still, were it not for his omission to express in words what was evidently in his mind, his readers would have formed a clearer conception of the character of economic problems and of the functions of economics, and much futile controversy might have been avoided.

We should then have understood how economic inquiry completes the results of other inquiries bearing incidentally on wealth. These other inquiries could, of themselves, never furnish absolute proof that a particular measure or course of action was calculated to increase the general welfare. We might learn from them that, through the operation of certain causes, man's working capacity was increased, or his zeal was stimulated, or that thrift was encouraged, or better forms of co-operation were brought about between capital and labour, or among capitalists themselves. But an

objection like that anticipated by ADAM SMITH in his famous chapter on division of labour would still be possible. Who is to tell us whether, in a society based on exchange with all its conflicting interests, and with the innumerable complications arising out of this conflict of interests, the effect produced by increased working capacity, zeal and thrift, or by the organisation of better forms of co-operation, would or would not be beneficial from an economic point of view? Who is to tell us whether those people may not perhaps be right, who maintain that the only result achieved by all this increased efficiency of labour, this thrift, this heaping up of capital, and above all, by the establishment of huge undertakings, is an increase in the volume of misery? There must be a science which answers such questions as these, which analyses exchange and serves as a guide through the intricacies that result from it, and it is with this science that the present treatise deals. This science does not profess to point out every one of the rules that have to be observed in order that material welfare may be promoted. Its aim is to shed upon those rules such light as may be obtained from the study of exchange.

The word exchange is used here in a sense intended to cover all commercial transactions. The labourer takes part in a commercial transaction when he agrees to give his services in exchange for money or some other consideration. So does the landlord when he lets his land; for here, too, there is an exchange of services. It is the same with the capitalist who invests part of his money by lending it at interest; for he supplies one or more people with means to assist production and accepts payment for doing so. Economic science makes these and all other kinds of commercial transactions the subject of its investigations. We must now show the nature of this research, the way in which it leads to the discovery of economic laws, and the nature of these laws.

§ 3

Economic Laws

All economic laws bear upon commercial transactions. What, then, is the real nature of such transactions?

A transaction is purely commercial when it involves an agreement, whereby a sacrifice of money, goods, or labour is made in exchange for some consideration, regarded by the person making the sacrifice as being of at least equal value. In most cases the motive underlying such transactions is some material and personal gain. Sometimes, however, the gain in view is not of a material kind; or, while some material advantage may be sought, the ultimate object is something other than material gain. We have innumerable proofs of this. The person who purchases a ticket for a concert or a play is not actuated by a desire for material gain. His object is either recreation or the gratification of a taste for art. But that object is considered worth the sacrifice; so the transaction must still be regarded as commercial. The same thing applies when a man spends his spare time in labouring to earn money which he intends to give away; or, whenever any one acts in behalf of the interests of another. Purely commercial transactions may be prompted by very exalted motives. A person who buys clothing or other necessities for the poor, or causes dwellings to be erected for them, may proceed on the strictest business lines when making his purchases, and contracting for his houses; but in doing so he seeks no material advantage for himself. It has often been said of economic laws that they are based on the assumption that man's sole aim is the acquisition of wealth. Some have even gone so far as to denounce the setting up of this hypothesis as tantamount to a glorification of selfishness. We regard this as a mistake. Economic laws are not based on the assumption that man strives for wealth alone, but on the fact that man engages in commercial transactions. Even if the personal acquisition of wealth were at all times the object of these transactions—which is not the case—one ought to discriminate between the two statements.

For, the fact that a person daily or occasionally engages in commercial transactions, does not imply that commerce is the mainspring of all his actions. So long as he lives in a society whose economy is based on exchange, he must, if he take part in that exchange, conform to the rules by which it is regulated. This is expected of him in precisely the same way as it is expected of him that, when taking a hand at

cards, he will conform to the rules of the game. Whether it be his object to earn an income, or to purchase necessities, or to invest capital, every one with whom he has dealings expects that he will do what he can to further the interests (whether they be his own or those of another) with which he is identified; and in their intercourse with him they will be guided by this assumption. As he is aware of this assumption, he takes care to justify it. Experience shows that commercial transactions may be engaged in daily, and with much shrewdness, by persons who give away a large part—perhaps the greater part—of what they earn. Business possesses attractions for them, and they know that their industry benefits other people. We find very charitable housewives, too, displaying true commercial instinct when purchasing their daily supplies. They keep philanthropy and domestic economy strictly apart, and hold that the separation is desirable for both. It may appear strange, that man should be capable of changing his attitude towards his fellow-men completely at a moment's notice; that he should feel no concern for them at one time, while at another he shows the utmost sympathy for those for whom the struggle for existence is a hard one. We cannot deny, however, that such is the fact, and must leave its explanation to psychologists.

Not every commercial transaction, however, is purely commercial. There are two ways in which it may become other than commercial. When one party defrauds the other he obtains more than the commercial equivalent of what he gives; or, again, one of the parties may be content to accept less than an equivalent, in which case he is making a present to the other party. We alluded above to the rules which govern exchange. These rules vary according to circumstances. When a man of good social position lets part of his land, or engages a domestic servant, he is not expected to act in the same manner as a broker dealing on the stock exchange. Exalted posts must always command respect; this of itself is a reason why such posts are conferred on different grounds from those which would be considered, for example, in the placing of a loan. What has just been said frequently acquires significance when we are tracing the effects to be ascribed to economic causes. Whenever we speak of commercial trans-

actions and their results, we must always ask ourselves how far these transactions have a purely commercial character.

We now come to the consideration of economic laws. A few words will suffice to show the part which commercial transactions play in such laws. No single economic law could exist if it were not possible to predict that, under certain conditions, people would engage in a particular kind of commercial transaction, or that a change would take place in the conditions under which such transactions were actually being engaged in, or that people would abstain altogether from taking part in them.

We know the meaning of the word Law. A law, in the sense in which we are here using it, implies necessity. The statement of a law is a proposition defining its operation. Some of these statements indicate constant—and therefore inevitable—phenomena, or else the manner in which such phenomena would manifest themselves in the absence of disturbing or impeding causes. Others indicate an effect or an influence. Most of the laws of political economy belong to this latter class. We will take the following examples: A redundant issue of paper money causes a drain of gold; a decline in the price of commodities promotes the import and impedes the export of goods in countries as yet unaffected by the decline; a rise in the rate of interest reduces the price of stocks; increase of population increases the rent of land; the taxation of land lowers the price of land. None of these statements relate to constant phenomena, as, for instance, the law of the conservation of energy; they state what will take place in the event of a certain measure being adopted, or of a certain thing coming to pass.

If we carefully examine the above or any other examples of economic laws we find that they always involve a very distinctive kind of statement, viz.—to use the words of Professor MARSHALL: “That a certain course of action may be expected under certain conditions from the members of a social group.”¹ In regard to some of these laws this will be

¹ *Principles of Economics*, third edition, p. 105. Quoted fully, the passage is as follows: “A law of social science, or a SOCIAL LAW, is a statement that a certain course of action may be expected under certain conditions from the members of a social group. ECONOMIC LAWS are those social laws which relate to branches of conduct in which the strength of the motives chiefly concerned can be measured by a money price.”

clear at the first glance. Thus, to state that a redundant issue of paper money results in a drain of gold is clearly only another way of stating that when too much paper money gets into circulation, bankers (the members of a social group) may be expected to adopt the course of exporting gold. In very many cases, however, reflection is needed in order to make this evident. A rise in the rate of interest reduces the price of stocks; increase of population increases the rent of land; the failure of the harvest raises the price of corn. Here we have statements, not that a certain course of action, but that a change in the relations of prices, may be expected. It must be remembered that these and similar statements point only to the first and last links in a chain. But if we look for the intermediate links, we always find what Professor MARSHALL has shown. Why does the failure of the harvest increase the price of corn? Not because the supply of corn would then fall short; for, of itself, this would only mean that at a given moment it would be impossible to procure any more corn. The reason why an unsuccessful harvest raises the price of corn is, that producers are prompted thereby to demand, and speculators and others to pay, higher prices for it. If the statement were given in full, it would point out that when the harvest fails, farmers, dealers, millers (members of social groups) may be expected to adopt a certain course of action. It should be observed that the statement goes still further. Not only does it teach us that a certain line of conduct will be followed, but it tells us also what will result from the adoption of that line of conduct, viz., a rise in the price of corn. Professor MARSHALL's definition of an economic law, as it appears to us, is wanting in completeness. But he has placed his finger on that which constitutes the kernel of every economic law. Only those statements by which it is expressed or implied, that a certain line of conduct will be adopted by a "social group"—frequently by more than one group—can be said to be economic laws.

And we know the nature of this line of conduct. We know that it consists not only in the carrying out, or the carrying out under altered conditions, but, frequently also in deliberate abstention from the carrying out of certain customary

commercial transactions. In the case of a failure of crops, the price of corn rises more rapidly if dealers refuse to sell. When the bank rate rises, stocks fall more rapidly in price if investors refuse to buy. The line of conduct of which we are speaking is always directly related to commercial transactions, but its efficacy may consist in performing, as well as in omitting to perform, such transactions. It has an effect on relations of prices, but it also arises from such relations, being in fact prompted by them. But the relations of prices may be such as to present no inducement for engaging in certain kinds of dealings. An article may be considered too dear by the consumer and too cheap by the holder; and so it often happens that the line of conduct expressed or implied by an economic law is one of inaction.

In all cases, however, the action is based upon some advantage; so that the possibility of predicting a course of action depends on the possibility of showing what advantage is involved. If we carefully examine any economic demonstration we always find that a very considerable part of it is devoted to inquiry into the creation, transformation, or disappearance of advantages or interests connected with exchange. An advocate of protection will hold that by placing high duties on foreign goods we diminish or do away with the advantage people may have in importing those goods, and at the same time create an advantage in producing the same class of goods at home. An advocate of free trade will argue that high import duties cause money wages to rise, and that a rise in money wages lessens any advantage people may find in producing goods for the foreign market. When we want to prove that a rise in the rate of interest causes a fall in the price of stocks, we show that it diminishes the advantages involved in the buying of stocks, and that these advantages do not recover their former importance until stocks have again fallen. Suppose that we wanted to find out what might be expected to result at the present time in Holland from the reopening of the Mint for silver. We should inquire what profit was to be made on the coinage of silver at the present price of that metal, and under existing rates of exchange. Having found that the profit would be a very large one, we should draw conclusions from the fact. Suppose that a certain measure

has been adopted, or that a natural phenomenon has occurred, by which the efficiency of labour has been affected; or that a change has taken place in manners or customs; and that we want to know what the probable effect will be, in the domain of economics. We begin by considering how various kinds of interests will be affected by the event, and unless we find it possible to give some absolute assurance on this point, we feel that we are not justified in pronouncing an opinion. One of the main factors of every economic argument consists in showing the origin and decline of interests—interests connected with exchange, be it observed. By this we mean any interest or advantage involved in performing, or abstaining from, certain commercial transactions, no matter what may be the nature of the consideration on which the interest or advantage is founded.

The use of geometrical figures for the purpose of explaining economic propositions and ascertaining new truths has come into vogue, as we know, within the last thirty years, owing to the influence of JEVONS and WALRAS (although others, and more especially GOSSEN,¹ had previously applied this method). In what has been said above, we have both an explanation of the reason why this method may be applied and an indication of the limits of the knowledge obtainable with its assistance. Frequently interests or advantages are capable of being measured. Sometimes it is possible, with the aid of a diagram, to illustrate the changes which they undergo and the manner in which they disappear. And there can be no doubt that the mathematical method is likely to give more accurate results, provided the rules and forms of geometry be carefully observed. Moreover, it affords us an excellent means of testing our conclusions, by seeing whether they can be set forth in a diagrammatic form. There are cases too—though not very many—in which a diagram is the clearest and simplest way of conveying a truth. Professor MARSHALL was the first to make it perfectly clear how rents are affected by agricultural improvements; and it is quite possible that, without the aid of geometrical figures, he might not have succeeded in doing so. But—and it is important to bear this in mind—such diagrams

¹ In his remarkable book, *Entwicklung der Gesetze des menschlichen Verkehrs*, a work which has remained unnoticed too long.

only inform us what interests are involved. Were this knowledge, which is in every case indispensable, sufficient for the discovery of economic laws, then all such laws would be discoverable by the mathematical method. But merely to know what interests are involved is not sufficient for the discovery of economic laws. To be certain that a particular course of action will be adopted by the members of a social group—to be certain, in other words, that the members of a social group will engage in particular commercial dealings, and that they will do so to an extent that will suffice to maintain the relations of prices or to modify them in a given direction,—presupposes two kinds of knowledge. It presupposes, firstly, that we know what interests are involved, and secondly, that an effort will be made to promote or safeguard those interests. No calculations or diagrams can ever enable us to be certain on the latter point. This indicates the border-line which limits the usefulness of applying the rules of geometry in the domain of economics.

But here also we come to a difficulty which has frequently to be encountered in economic investigation, and which sometimes appears insuperable. This difficulty must not be underestimated or neglected. But neither must it be regarded as a barrier to the construction of economic theories, which still possess as much value as the theories of any other science. We shall endeavour to avoid either mistake, and will begin by ascertaining the extent and importance of this special difficulty.

§ 4

Difficulties to be encountered in the tracing of Economic Laws

Every economic law presupposes, in the first place, the existence of some interest, and secondly, that an endeavour will be made to promote or safeguard that interest. But all interests are not equally obvious and equally certain.

If the price of an article falls in one country while it remains unchanged in a neighbouring country, and if the fall is sufficiently great to create an advantage in exporting that class of article, it is generally safe to predict that the difference between the prices of the two countries will quickly diminish

to a point at which it will hardly be profitable to export any longer. For, in a case of this kind, the transfer of the goods to the more profitable market requires little time, and is attended with small risk. We had to do with a similar case further back in speaking of the reopening of the Mint for silver. It does not take long to convey the silver to the mint; and those who convey it thither for the purpose of having it converted into coin know beforehand what profit they will make on the transaction.

But let us take some other examples. Suppose that shipping freights are rising; will it, therefore, be profitable to engage in shipbuilding? Suppose that the margin of difference between the cost of the raw material and the price of the finished product in a certain branch of industry becomes very large; will it, therefore, be advantageous to extend that branch of industry? Would the fact that a joint-stock company had been paying larger dividends in recent years make it a sound venture to take shares in that company? Or, again, suppose that the rate of interest is going up, so that stocks may be expected to fall; would this be a favourable moment to sell stock redeemable at par? In cases like these there is uncertainty as to what course will in the end be most advantageous. What course will be adopted will depend on the general tone pervading business circles; it will also depend on individual impressions and temperament. If it be a time of depression, very few people will be found to believe that the high shipping freights, large margins, or big dividends will be maintained. If it be a time in which a spirit of speculation is rife, the reverse will be the case, and many large businesses will be founded.

But granting that the interests or advantages are obvious to those who are aware of them, it is perfectly conceivable that this knowledge may have reached but few, or even that nobody may have been able to acquire it. In countries where more or less primitive conditions prevail, large profits may be made by a few traders, unknown to the general body of their fellow-traders. Who could say with certainty that the difference between the price of a commodity on the coast of Africa and the price of that commodity in the interior would never exceed the cost of transport from the one point to the

other? In such countries many branches of industry or agriculture would be created if people only knew in what proportion the cost of production would stand to the value of the product. Have we not instances in Western Europe of successful industrial experiments whose initiation was delayed for many years through ignorance or lack of enterprise?¹

But even where it is recognised that there is an interest to be served by adopting a certain course of action, it may happen that the opportunity will be left unutilised simply because of the impossibility of taking advantage of it. We are not thinking now of such requisites for the success of an undertaking as experienced managers and skilled operatives; without these there could hardly be said to be a motive for embarking in an undertaking, since the result would be loss instead of profit. We are thinking at present of material resources, of capital, the lack of which more frequently forms an obstacle to the starting of enterprises than people generally believe. Not every one possessed of ability enjoys the confidence of capitalists.

Lastly, all the conditions needed in order to promote or safeguard an interest may be fulfilled, and yet the impulse to profit by the occasion may be wanting. NEWCOMBE, the American author, tells us of certain merchants in South America who thought to induce the natives to supply them more abundantly with a certain article by offering double the usual price. The result, however, was, that the supply was reduced by one-half. Here an interest was created, but it led to the very reverse of what had been expected. There would be no difficulty in adducing innumerable examples of a similar kind; nor would it be necessary to seek for them in the doings of uncivilised peoples. In the seventeenth and eighteenth centuries it was commonly believed that when wages were increased less work was performed.² This opinion was

¹ In his interesting work entitled *Die agrarischen Aufgaben der Gegenwart* (Jena, 1894), pp. 122-124, Professor VON DER GOLTZ states that in agriculture and stock-rearing it is a frequent thing not to know with certainty which branches are profitable and which are not. He attributes this to a "dislike for sums" ("Unlust zum Rechnen") peculiar to the peasant, which he describes as a "disease from which agriculture is suffering a good deal at the present time."

² See L. BRENTANO, *Ueber das Verhältniss von Arbeitslohn und Arbeitszeit*, second edition (Leipsic, 1893), p. 2.

strenuously combated by ADAM SMITH,¹ who proved the reverse to be the case, namely, that by giving more liberal wages we increase the industry of the wage-earner. But can any general rule be laid down in this matter? Does not everything depend upon the state of civilisation and the standard of comfort of the labouring population? And is it not conceivable that when both are low a more liberal reward of labour may have results similar to those referred to by NEWCOMBE?

And now, as to the conclusion to which all this leads. Some would have it that one conclusion only is possible, namely, that there can be no such thing as an economic law. Others, while admitting the possibility of economic laws, and the importance of the work of tracing them, would have us bear in mind that such laws can only apply in the abstract; that is, under conditions which are never quite fulfilled. Such people would hold that economic science employs imaginary quantities, but that its practical utility is no more impaired by this fact than is the practical utility of geometry by the fact that there are really no such things as a mathematical point or a mathematical line. Before examining this view we have to offer a few remarks of a general character.

The expression "law" is rightly regarded as conveying the idea of something insubvertible, something on which absolute reliance may be placed. And yet there is not a single law, economic or other, on which we may depend absolutely. The validity of natural laws is conditional upon the order of the universe not being overthrown; that of economic laws, upon no fundamental change taking place in human nature, as we know it. If ever a time should come when man, without being impelled by religious or other motives, will choose what is distasteful in preference to what is pleasing to him, just because it is distasteful; or when he will neglect to use the means to an end, solely in order that he may fail to attain that end,—then, indeed, no economic laws will be valid. It would be tedious to dwell on this point; but we were bound to mention it.

Let us now examine the contention that the conditions under which economic laws apply are never quite fulfilled. In

¹ *Wealth of Nations*, Book I. chap. viii.

order to show the error of this contention we have only to recall the words of Professor MARSHALL: "A social law is a statement that a certain course of action may be expected under certain conditions from the members of a social group." In the first place, we would observe that frequently the number of persons forming the group need not be very large. So long as the present currency laws of Holland and England remain in force, and the British sovereign and half-sovereign retain their present legal weight, the rate of exchange with London can never fall much lower in Holland than about 12.04 florins to the pound sterling, since, at this rate of exchange, it will be profitable in Holland to import gold from England. How few people are aware of this! But for three or four bankers to be aware of it is enough to make it a truth to be relied on. In the same way, competition among a very small number of manufacturers may prevent too great a widening of the margin between the price of the raw material and that of the finished product. Or competition between a comparatively small number of shopkeepers may keep the profits of their trade within normal limits—in fact, the application of the principle of the Paris *Bon Marché* by one large establishment will suffice to do this.

An obvious interest does not at all times exist. Are we, therefore, to say that it never exists? An interest may exist and be neglected. But we see innumerable interests being attended to with the utmost zeal. There are instances—and upon their observance important economic laws are based—where neglect of an interest is indeed possible in the case of a small number of individuals, but this could never become the rule instead of the exception without entailing evils which would bring about their own remedy. If the whole of the producers of a particular article were to decide to sell it in future for less than the cost of its production, the article in question would soon disappear altogether from the market, and all those who produced it, however wealthy they might be, would become insolvent. Very high prices would then be offered for it, and this would prove an incentive to many. Were a new "social group" of producers now to arise, there would be but one condition under which they could, in the long-run, keep up the supply of the required article; and that condition would be, that they did not sell it for less than it cost them.

There are interests, again, as to the safeguarding or furtherance of which it would be unreasonable to have any doubts, while human nature remains what it is. Two different persons ask a man to do one and the same job. Both offer to pay the same sum of money; but while one is prepared to pay on completion of the work, the other offers to pay at the end of five years. Which offer will the man accept, assuming that his decision is influenced neither by friendship nor philanthropy? Through an accidental combination of circumstances, it happens that a commodity which improves greatly in quality by being kept for some months may be purchased as cheaply in a seasoned condition as it could if it were new. For which quality will the demand be greater? A tree is planted. Should it prosper in growth, its value, half a century hence, judging by the present price of timber, will be five pounds. Would anybody offer that sum for it now? There is no uncertainty as to the answer in any of these three cases. Yet those who are familiar with the standard work of the Austrian writer BÖHM-BAWERK will not have failed to notice that we have been using materials employed by him in framing the laws which govern interest on capital.

A considerable decline in the imports of merchandise takes place in consequence of a high protective tariff. The ships and rolling-stock employed in exporting merchandise return but half filled from abroad, so that shipowners and railway companies are doing little business. Are we wrong in expecting that before long they will increase export freights? And this increase will have a practical significance. Just now we gave specimens of the material which is used for framing the laws which govern interest on capital. Here we have some material for framing the laws which govern the relation between exports and imports.

Those who insist that it is never possible to foretell what course of action will be taken, certainly go too far. There are numberless instances where it may be foretold with certainty by any one sufficiently acquainted with the commonest characteristics of human nature, or with prevailing customs and usages, or with the constitution of society. How, otherwise, can we account for the number of economic laws which are always confirmed by experience? Economic science does

not deal in hypothesis to the extent that some people maintain. It is true, nevertheless, that the uncertainty of which such people complain does exist in many cases. But in this uncertainty there are different degrees. We will briefly notice each of these degrees, so as to show the extent to which knowledge may be obtained in the case of each.

Firstly. It may be impossible to state precisely what course of action will be taken; but it may be possible to state it approximately. We know the distinction between the full competitive rent and the actual rent of land. The former is the rent which the landlord could secure by acting on strictly commercial lines, but nobody can tell whether, or if so, to what extent, he will act on those lines. We may perhaps know that it is not usual, in a given country, to demand the highest possible rent—to which, in England, the invidious expression *rack rent* is applied—but customs of this sort may change. In a time of falling rents the liberality of landowners will be put to a severe test. Does it follow from this that economic science can teach us nothing of the economic laws governing rent? The reverse is the case. In the nature of things, the actual rent can never, in the long-run, exceed the full competitive rent—at any rate to an appreciable extent. This of itself is an instructive fact; it fully explains, for example, why rents have fallen in recent years. Once we know that the price cannot, in the long-run, rise above a certain point, it becomes important to be able to discern what may produce an upward or downward movement of that point, and the importance of discerning this is increased when there is every reason to believe that the price cannot move far above or below that point.

Secondly. It may be possible to predict with certainty the course of action that will be adopted under certain conditions, in a country where an advanced stage of civilisation has been reached, where all classes of society engage in exchange, and where there is plenty of circulating capital; while it may be impossible to predict it in respect of a country in which these conditions are wanting. The economist must always make sure that he knows how far these conditions are fulfilled, and he must be careful not to give to his conclusions a wider bearing than the circumstances warrant. A law may, however, be so framed as to obviate any error of this kind. Reference

may be made to the fact that social groups, which in Western Europe or Eastern America, owing to their energy and the keen competition carried on among their members, ensure the unfailing operation of many economic laws, do not exist elsewhere, and did not exist in former times. Next to the study of economic history, no better means exist for getting a complete knowledge of the conditions under which certain commercial transactions will be performed, or performed to an extent that will suffice to bring about certain results, than to contemplate—and where opportunity occurs, to come into contact with—economic conditions differing from those among which we live. Still, our efforts to reach this perfection will in many cases be only partially successful, since even the means just indicated can never quite compensate for the fact that we do not possess enough imaginative power to enable us to bring every conceivable set of circumstances before our minds. It is desirable, therefore, wherever there may be reason for fear on these grounds, to make it clearly understood that the law is declared to be applicable only among a people having a highly developed system of commerce. Its applicability to other nations will then remain a matter for future investigation.

Thirdly. We may know that at some time or another this or that line of conduct will be chosen. Freights have risen: an increase of shipbuilding must ensue at some time or another. House rents have fallen: at some time or another the price of building land must be affected by the fall. But there our knowledge ends; and we are unable to say whether the period of time which must elapse before the expected result takes place will be long or short. In such cases—and they frequently arise in economic inquiry—a statement of what may be expected to happen in the *immediate* future cannot be made, and we find instead a statement of what will happen “in the long-run,” a form of words which suggests the question, “How long must we wait?” This question can seldom be answered. Nevertheless, the statement which gives rise to it is useful, as it indicates that which, under certain circumstances, is bound to happen sooner or later; and tells us what we must prepare for when we find that these circumstances have arisen.

Fourthly. We may know the course of action that will be

pursued, but not the intensity with which it will be pursued. In a case like this it will be safe only to say that a certain kind of commercial transactions will ensue without entering into particulars as to what will result from the performance of such transactions. A fall in the price of an article always results in some increase in the demand for that article. At times, however, the increase is so slight that no perceptible recovery in the price takes place. A rise in price always moderates the demand to some extent, but sometimes to so slight an extent that the French proverb, *Le meilleur remède contre la cherté est la cherté*, is not fulfilled. The economic inquiry will nevertheless have been useful, if it has rid us of false knowledge, or enabled us to see that certain opinions which are popularly held or disseminated by superficial writers are not strictly correct. Besides, there is no reason why we should not succeed in tracing the cases in which impulses to action will be strong, and those in which they will be weak. We might endeavour, for example, to ascertain the kinds of prices that exercise a strong and rapid effect upon demand and those that do not. Here again, therefore, the limits of economic inquiry are not reached.

Lastly. Various courses of action are possible, but as the choice is limited all of them may be mentioned. For example, a law is passed reducing the hours of labour; and in certain trades the operatives either fail or are backward in speeding up their work sufficiently to prevent a diminution of output. *Entrepreneurs* may now be expected to adopt one of three courses. They will either (1) make no change in the hourly rate of wages, so that operatives will have to do with less money per week; or (2) increase the rate per hour sufficiently to enable the men to earn as much per week as formerly (in this case the *entrepreneurs* may or may not ask higher prices for their services or their products); or (3) they will adopt some middle course. We can work out each of these suppositions. We can endeavour to find out whether the course which we assume to be the one that will be adopted is a course that can be persevered in; in other words, a course that can be adopted "in the long-run"; and if so, what results will follow from its adoption. Interesting deductions may often be made in this way. The conclusion arrived at

may be that, irrespective of the line of conduct adopted in consequence of a legislative enactment by those whose interests are affected thereby, the results of the enactment will always be either pernicious or salutary.

An objection arises here, however, and it must be answered. It was observed further back that every law which states how a given cause will affect a relation of prices—and there are many such laws—involves an assurance that under given circumstances a certain course of action will be adopted. The question might now be asked, whether it is right to apply the word “law” to a conclusion in which an hypothesis supplies the place of a definite assurance. The answer is, that the hypothesis never quite takes the place of an assurance. In the case of legislative restriction of working hours—to use our latest example—we do not know what line of conduct *entrepreneurs* will adopt. Were we to be equally in the dark as to the effect which their course of action would have on that of others, it would be impossible for us to throw any light whatever on the question. The way out of the difficulty, in a case of this kind, is to change the form of the question. In the present case, for example, we might state it like this: What will be the effect of a reduction of working hours under the following circumstances? Among the circumstances we would then include the line of conduct about which we were uncertain. The solution of a problem can never be reached by means of hypothesis alone, unless, indeed, it be stated in such a way that the solution is involved in the formula itself; in which case it is scarcely correct to speak of it as a problem.

Such problems do, in fact, occur in the domain of economics; and then, and not until then, do we reach the limits of our science. The rate of interest rises: how will this affect the demand for furniture? Nobody can tell us; nor is it possible for us to diminish our ignorance on the subject by premising assumptions which may be altogether wrong concerning those groups of persons among whom the demand for furniture is greatest. An economic theory, if it is to have any value at all—even theoretical value—must have some basis to support it; and that basis fact alone can supply.

This does not conflict with what, in conclusion, we have to say about one particular hypothesis, which is implied in

every economic law that expresses something more than a force or a constant phenomenon.¹ The hypothesis is that no counteracting causes are at work. What we are about to say is so simple that it would be superfluous to call it to mind, were it not that experience shows that it is being constantly forgotten. The proposition that increase in population causes the rate of interest on capital to rise, does not signify that when the population increases, the rate of interest *must* of necessity rise, but that this cause has a tendency to make it rise. The proposition that scarcity of money causes prices to fall, does not signify that every period of scarcity of money will be followed by a general drop in prices. For, should the scarcity occur coincidently with the development of credit, whereby greater economy in the use of money was rendered possible; or should it coincide with a decline in wealth or in trade, in consequence of which a smaller quantity of money was required, prices would not necessarily fall; and, in fact, they might rise. But the rise would not be so great as it would otherwise have been, and so our law would really have held good. THOROLD ROGERS, the well-known author of the *History of Agriculture and Prices in England*, often speaks with disparagement of that searching after *tendencies*, after laws indicating tendencies and nothing more. The example adduced just now may serve to show how greatly he erred in doing so. Suppose what was said above to have been the case. Suppose that, in spite of greater economy in the use of money, no general rise, or only a slight rise, in prices took place. This would strike us as very strange, were we not aware of the fact that two causes tending to produce opposite effects had been in operation; and were we unable to judge accurately of the operation of each of these causes. To search for *tendencies* is to endeavour to ascertain the various causes which exercise an influence upon values, and the nature, and if possible the extent, of that influence. Is such knowledge as this useless? The population of a country increases, and wages at the same time go up: does it not concern us to know whether wages

¹ Such, for example, as the law of the Equation of Prices, according to which prices tend towards a point at which there is equilibrium between supply and demand.

have risen in consequence of the increase of population, or whether they have risen in spite of it? A protectionist policy is adopted and national wealth increases: ought we not to ascertain whether the increase of wealth has been promoted or retarded by the adoption of the new policy? Production has been increased until it has reached a figure previously unheard of, while pauperism has not diminished: is it of no interest to us to find out what would have happened as regards pauperism if the increase of production had not taken place? But to enter upon an inquiry of this kind is to apply ourselves to the tracing of economic laws, to try to become acquainted with the operation of causes, with the forces which they set in motion. In order to measure these forces, we must assume that their action is unimpeded. The same thing has to be done in physical science. In order to calculate the velocity of a falling body we cause it to fall in a vacuum. The economist has no opportunity of carrying out experiments: nevertheless, he follows the example of the physicist; he *isolates*; not in reality, however, but in his imagination.

§ 5

The Method of Economics

From what has just been said, it will be seen that *Reasoning*, or—to use a technical expression—*Deduction* is the only method by which successful results can be obtained in the tracing of economic laws. JEVONS¹ correctly defines reasoning as “getting some knowledge from other knowledge.” The deductive method, therefore, involves a twofold process: firstly, giving a complete account of the knowledge already acquired with respect to a given subject, or range of subjects; and secondly, combining given truths in such a way as to cause new truths to become manifest. All economic laws are discovered in this way, there being no other way open to us for their discovery. The times in which the deductive method has been judiciously applied have always been marked by an advance in economic science; and though interesting data may have been obtained

¹ “Logic,” p. 13, *Science Primers*, new edition (London, 1878).

in times when the deductive method had fallen into desuetude, such data have remained unutilised, and economics as a science has remained at a standstill. Such a period as this has been passed through, nor did it come to an end before the well-tried method had been applied once more with energy and talent. The new theory of value has been deduced entirely from propositions familiar to all, because based upon experience, but whose great importance had not previously been thought of by anybody.

These statements are not too absolute. There are only two ways in which we can discover laws, one being that just pointed out and the other that known by the name of *induction*, whereby the action of the cause is discovered, not by the process of reasoning, but by observation. In order to determine the operation of a given cause by means of observation, it is necessary to make quite sure that that particular cause alone is operating; therefore the inductive method demands the exercise of special precautions, and these are impossible in the domain of economics. Suppose that we wanted to ascertain by means of induction how an increase in the rate of interest would affect the price of stocks; would it be possible for us to make all the other causes which might influence the price of stocks suspend their operation for a while? When speaking of a law or of the results of some occurrence, we often say that the matter has been decided by experience. In such cases it is not experience that has decided; we ourselves have done so, and our decision has been arrived at by a process of reasoning. We noticed that certain things took place after the event, and they happened to be the very things which, on theoretical grounds, we expected to take place. Reflection made us conclude that they could not have been brought about by other causes, and the conclusion was obvious. It may have been correct; but experience could not do more than give it a certain measure of probability. The extent to which it deserved to be regarded as quite trustworthy depended upon the accuracy of the reasoning by which it was arrived at.

No one really believes it possible to rely upon the results of an economic inquiry in which the inductive method alone has been applied. The most zealous advocate of this method would refuse to admit that two economic facts were connected,

however frequently he might have observed the one to follow upon the other, until he was in a position to show that the second fact was caused by the first, and to explain how it was caused. Where deductive proof cannot be supplied, no value whatever is attached to inductive proof. In the first three months of every year, from the middle of January to the middle of April, there is always a great falling-off in the demand for credit at the Netherlands Bank. It happens that this also is the very time when tradesmen send out their bills and part of those bills are paid. It would be difficult to point to two economic facts recurring together with greater regularity. Were any one to attempt to show by deduction that the facts are inter-dependent, we should certainly be disposed to give the argument every consideration. But the mere assertion that the facts recur simultaneously, and are *therefore* inter-dependent, would simply elicit a smile.

In the domain of economics reasoning alone can produce conviction; for everybody is aware of the multiplicity of the forces that are in operation, and of the arbitrariness of singling out one particular force as the cause of a particular event without deductive proof. When people wish to prove their case by appealing to sequences, they invariably try to obtain deductive proof, and unless their proposition be one that has been frequently supported by deductive reasoning, they endeavour to render it acceptable to begin with. Not until they have to some extent succeeded in this do they appeal to experience for support. Not infrequently this appeal serves as a cloak to cover the weak points of an argument, and for that reason it should always be received with great caution. It should never be allowed until the argument which it is meant to support has been scrutinised from all sides and found to be thoroughly sound.

We do not mean it to be argued from what has been said, that, when a legislative measure has been introduced, or some other event having an economic bearing has taken place, it would be useless to take careful note of what happens afterwards. Quite the contrary. Observation cannot be too strongly recommended to the economist, since it is the best means for leading him to felicitous hypotheses, and the only means for enabling him to collect the information on which

he will have to base his deductions. It would be a mistake to create an antithesis between the empirical and the inductive methods. But, however needful, or even indispensable, observation may be, it never supplies the economist with anything more than raw material from which his mind alone is capable of producing a scientific result. And this applies to observation of what takes place after the adoption of a measure, or the occurrence of an event bearing upon economic matters. It is extremely desirable that such sequences should be observed and noted, but they should never be set down as effects of a cause, whose economic action it is desired to ascertain, until it can be proved by deduction that they may really be regarded as such.

The inductive method is frequently regarded as being extremely safe. The fact is, however, that almost all popular errors have originated in the belief that it was safe to rely on induction. The deductive method has no claim to simplicity; in fact, it strikes us as being beset with difficulty and danger. That it so impresses us is one of its merits.

§ 6

Plan of this Work

We have described the nature of economic laws, and emphasised the truth that such laws always have a direct bearing upon, or else presuppose, commercial transactions. Commercial transactions are transactions in exchange. From this it follows that economic inquiry is primarily concerned with exchange, and that no efforts to solve great economic problems can be successful until light has been brought to bear upon every one of the phases of exchange. Among the great problems of economics we assign the first place to the question touched upon in the earlier part of this introduction, viz., does exchange make any difference in the general conditions of material welfare? We should almost be inclined to say that all the great problems of economics might be condensed into this one question, were it not that we are confronted by a still more important question, viz., are the principles upon which society is now based capable of being

maintained; or will mankind have to enter upon the road leading to the introduction of communism?

Our explanation of exchange consists of two parts. The first part elucidates the concept *Value in Exchange*, and shows the causes by which it is controlled. A mere general handling of this subject will not suffice for our purpose here. We shall have to discuss the forms in which value in exchange is manifested, including rent of land and houses, profits, wages of labour, and the prices of commodities. For, although the general law, which we intend to state at the outset, asserts itself in all these values, it will be necessary to illustrate this in particular cases, the more so as in particular cases we are confronted with details which deserve our attention on their own account. This will serve to indicate the contents of the first part of the present work, and to show the importance of the subjects of which it treats. It must be remembered that, in a society in which exchange is fully developed, the whole economic condition is reflected in the relations existing between values; *i.e.* in the relations in which the values of such things as dwelling accommodation, the services of *entrepreneurs* and capitalists, and the services of labourers stand to other things. He who knows how these values are proportioned to one another in a given country, knows the degree of welfare enjoyed by every class of which the population of that country consists. Whosoever has ascertained the causes which give rise to, or disturb, or destroy these relations, is in a position to solve many of the most difficult of the problems of economics.

Exchange presupposes *Instruments of Exchange*. A consideration of these is therefore necessary in the second part of our explanation of exchange. We have alluded to the obscurity to which exchange gives rise as regards the conditions which determine national wealth. To a great extent this obscurity is due to money, the importance of which has been greatly overestimated by the mercantile system, which had its origin in the seventeenth century, and continues to exist at the present day. The second part of this work, therefore, deals with currency, banking, the foreign exchanges, and the laws which govern the distribution of precious metals. Owing, however, to the intimate connection existing between value in exchange and

instruments of exchange—a connection which is especially discernible in money prices—it will be impossible to avoid discussing in the first part a few points which might properly have found a place in the second part of the work. For instance, the chapter which treats of interest on capital will be found to contain an analysis of what is usually spoken of as the money market, and which it would be much more accurate to speak of as the market for capital.

Production is not dealt with until we get to the third part (in Volume II.) of this work. What is production? Is such a thing as a general glut possible? Would it be wise to allow production to be regulated entirely by private interests; or should the community take any action in the matter, and if so, what should be the limits of such action? What should be our attitude towards the Malthusian theory of the relation of production to population; towards protection as a means of fostering national industry? We shall endeavour to find the answers to these and similar questions. At the same time, in view of the great interest which is justly being taken in agrarian problems at the present day, special attention will be given to the question of production in relation to the systems of land tenure.

The fourth or last part (also in Volume II.) of the work must be regarded as an appendix. It treats of the *Revenue of the State*, a branch of the theory of finance on which economic science can throw much light, but which cannot be regarded as exclusively economic.

The arrangement here decided upon differs in several respects from those usually adopted. There are, it is true, almost as many modes of arrangement as there are economic text-books. Nevertheless, it is a feature common to most of them to assign to production—sometimes after some introductory matter—the first place in the order of the subjects to be discussed. One of the few exceptions to this rule is furnished by the French writer CHARLES GIDE, whose excellent work, *Principes d'Economie Politique*, is to be highly commended for this as well as for other reasons. It was clearly seen by GIDE that in a society based upon exchange, production cannot be explained before value has been discussed, and this is why the first of the four books into which his work is divided treats

of *La Valeur*. In his treatment of production itself, GIDE is mindful of the close connection which exists between it and exchange. He even goes so far as to treat money, international trade, and credit as coming within the scope of the theory of production, under the heading of *Conditions sociales de la production*. But in one respect GIDE goes too far, while in the other he does not go far enough. He fails to go far enough, when, in the first part of his book, he discusses value in a general sense only, and says nothing about the value of services, the treatment of which he leaves till the fourth book, where he discusses distribution. The consequence is, that he finds himself compelled to speak of production before he has explained the laws governing the rent of land, interest, profits, or wages; in other words, before he has explained the very things which every *entrepreneur* knows to be intimately related to production, though every *entrepreneur* may not be able to explain the nature of the relation. Production is engaged in with a view to securing a profit, and this profit will not be secured unless the value of the product exceeds the outlay. This outlay includes rent, interest, and wages; so that whatever we are told about production must necessarily be very incomplete until we have been told what regulates rent, interest, and wages. Do these govern the prices of commodities, or are they governed by them? Is an article dear because it costs much in wages to produce it; or can the worker earn much by producing it because it is dear? In a word, what theory must we propound with respect to the so-called "cost of production" of which *entrepreneurs* have so much to say, and which occupies the attention of producers in no less a degree than does the question of what the produce will fetch? All these points need explaining *before* we can touch upon the problems of production. The theory of money, too, will first have to be examined. As a result of freedom of international trade we sometimes have the choice of two ways of obtaining a commodity; the one being to produce it at home, and the other to import it from abroad. What influence does this choice exercise upon national industry, and what determines our choice? The mere stating of questions like these suffices to show how many matters connected with production must remain enveloped in obscurity until we have ascertained

the causes that govern the value of money (as expressed in prices) and the distribution of the precious metals. We are confronted, for example, with the question, whether the purchase of goods abroad results in exports of money or exports of goods. An important practical question, but also a question closely connected with those for which we ask a solution from the theory of production.

GIDE, it must be admitted, has not failed to observe the connection between the theory of production and the theory of money. But how does he show this? By including money among the "social conditions of production." This is where he goes too far. If the theory of production ought to cover everything that could be regarded as pertaining to the social conditions of production, then it ought to cover the whole field of economics. One of these conditions is, that there be workmen who receive wages; another, that there be capital, and that it yield interest; a third, that there be land, and that it be used or leased. It is often difficult to define the limits of a subject, but here we have them arbitrarily defined. The author concludes the enumeration of what he regards as the conditions of production at a given point; but it is not clear why he concludes it at that particular point, and does not continue until everything coming within the range of economics has been included.

We have spoken at some length of GIDE's arrangement, because to some extent it resembles that adopted in the present work, and it was necessary to show why we could not adopt it in its entirety; but chiefly, because we wished to make it quite clear that production must be discussed at the end, and not at the beginning of the work. As the opening subject of a treatise on economics, production is never adequately discussed. The space set apart for it is usually found to be filled up with information of a technical nature intended to show the causes by which the volume of production is increased, while no answer is given—for none can yet be given—to the question whether or not increase in production means increase of wealth. Or, we find opinions about capital and its accumulation; which might with equal, if not greater, appropriateness have been given in some other part of the book. There is indeed another plan, that adopted by J. B. SAY, who, in his *Traité* of

1803, allows scarcely less space for this section than that allowed in GIDE's work, thereby giving rise to the same question, viz., why not have proceeded a little further in the same direction?

Throughout the whole course of economic inquiry the mind has to remain centred upon production; we must keep constantly approaching it. It may be regarded as a ground upon which different roads intersect and different problems intermingle. When we are examining the theories of value, of money, of the foreign exchanges, of banking, the main question is always this: Are the words with which ADAM SMITH opens his *Inquiry* true or not? Can it be that the complexities arising out of exchange only blind us to the perception of a few extremely simple truths, and that all our mental labour only serves to make us realise these truths in their simplicity, but at the same time in their great significance?

GIDE devotes a separate part of his work to the subject of *Consumption*, and in this he has followed the example set by J. B. SAY. The same example has been followed by many others, though not by all. Inasmuch as the function of economics, according to SAY, consisted in explaining the origin, distribution, and consumption of wealth (*la manière dont se forment, se distribuent et se consomment les richesses*), that author felt bound to take consumption as a heading for one of the three parts into which he divided his work. But when it came to filling up the space which he had set apart for this subject, he found himself unable to hit upon anything better than an account of the different kinds and the general effects of consumption; the difference between unproductive and reproductive consumption, with their respective results; and observations on matters connected with finance, which take up three-fourths of this part of the work. We find GIDE in a similar predicament. He deals with finance in an appendix; but of the three chapters into which he divides his short section on consumption, the second treats cursorily of saving—the reverse of consumption—and the third of investment (*placement*). Here we find him controverting the well-known proposition, that a man who spends the whole of his income creates more wealth than the man who saves a part of it.

The discussion of this question would have been equally appropriate in any other part of the book.

It is impossible to find subject-matter for a section on consumption without impoverishing the remaining sections, or without treating finance as if it were a branch of the theory of consumption, which it is not. There is no such thing as a theory of consumption, in the sense of a branch of the science of economics. We recognise a theory of distribution because there are economic laws governing distribution, and for a similar reason we recognise a theory of production. As there is no public authority for assigning to each person his share in the general income, and as everybody is free, within certain limits, to produce what he likes, it is highly important to ask, by what standard each individual's share is regulated, and what determines the kind and the quantity of production? Speaking literally, mankind lives under a system of economic anarchy; but is the anarchy, perhaps, more apparent than real, after all? We know the direction in which we have to look for the answers to these questions, but, were we to ask similar questions with reference to consumption, we should be stepping beyond the border-line of economic science. An economic law presupposes that under certain conditions a certain line of conduct will be followed with respect to commercial transactions. But consumption (in the ordinary sense) is not a commercial transaction. It gives rise to such transactions and, therefore, influences production; it diminishes supplies and, therefore, affects values; it may be excessive, and then it leads to destruction of capital. To lose sight of consumption in an economic inquiry would be to neglect that without which there could be no science of economics. But all this does not suffice for establishing a theory of consumption as a branch of that science. A place for such a theory must be sought elsewhere. It may be sought in the domain of anthropology, where it could show how a nation's progress in civilisation may be gauged by observing the nature of the goods which it consumes; or it may be sought in the domains of hygiene and ethics, where it could show the extent to which man is influenced by what he consumes; or in the domain of private economy, where it could prescribe

rules for enabling individuals to satisfy their wants as consumers with the minimum of sacrifice.

SAY'S mistake has arisen from his erroneous definition of the function of economic science, which is not a science of commodities or of wealth, but of transactions involving an exchange, and of the manner in which these transactions affect values.

PART I

VALUE IN EXCHANGE

CHAPTER I

THE ORIGIN OF VALUE IN EXCHANGE

§ 1

Economic and Non-Economic Goods

NOT all the things which man finds at his disposal, or of which he is able to acquire possession, are goods. Only those things are goods which can serve directly or indirectly to supply wants. Whether we can regard things as representing goods for us or not depends not only upon their own qualities, but also upon the extent of our knowledge, the stage of civilisation to which we have attained, the climate in which we live, our trades or occupations, the peculiarities of our tastes, and even upon our age or the ages of those for whom we have to provide.

In some cases, too, it depends upon the extent to which our wants in respect of other goods can be supplied. For, many things are useful only in combination with other things. A part of a tool, for example, is useful only when the other parts are available as well, and the whole of a tool only when materials are forthcoming.

There are more standards than one according to which goods may be classified. We may, for instance, distinguish goods intended to afford permanent enjoyment, such as houses and furniture, from those destined to be consumed, such as corn and tea; or we may distinguish goods which are instruments of production from those in acquiring which instruments of production have to be employed; or we may distinguish capital from income.

Each of these classifications is important, and each will be discussed in turn. Goods may, however, be classified from another, and totally different, point of view, if we regard their available *quantities* in relation to the needs which those quantities have to satisfy. Regarded from this point of view, goods may be divided into two main groups, viz. :—

Goods of which the supply is always *greater* than the demand, and—

Goods of which the supply is always *less* than the demand, or only just equal to it.

The word demand is used here in the sense of *amount needed*. A merchant or manufacturer is often heard to complain that there is no “demand” for his goods. The article is not in request, he says, because the “demand” has been satisfied. He does not mean us to understand by this, that everybody has been supplied with all that he needed, so that there are no people left who desire to possess any of his goods. He means that there are no more persons who are willing to buy. He is speaking of the demand as manifested in the market price. Were he to distribute his goods *gratis* he would find at once that there was another kind of demand ; a demand far more difficult to satisfy. Such expressions are elliptical. The quantity of goods that will suffice to meet the “demand” spoken of by the merchant or the manufacturer is not the quantity really needed, but only a part—sometimes a very small part—of that quantity. It is the quantity that can be sold, and no more. What we mean to speak of here is the quantity of goods required to meet such a demand as would arise if the goods were to be had for the asking.

We are fully aware that even after this explanation some uncertainty still remains as to where the boundary-line must be drawn. Wants are elastic. When a commodity becomes dear we generally find that we can do with less of it than we had deemed possible. This, however, as we shall presently see, is a consideration which has no weight in the matter with which we are now concerned. Commodities of which the supply already exceeds the demand generally exist in such abundance that they may be wasted with impunity.

In order to simplify matters we will now give a name to

each of the two groups: the first we will call *non-economic*, and the second *economic* goods. These designations, already long in use among German economists, are not arbitrary. They require but little explanation.

If the demand for a commodity exceeds the supply, so that the commodity falls within our second group, and if this condition of things is not temporary, not the result of a chance occurrence, but permanent and normal, it follows that a part of the demand for that commodity must remain unsatisfied. How far there will be uniformity or inequality in the extent to which different people will have to go short of that commodity depends upon circumstances. In the existing order of society it often happens that an article, the available supply of which is insufficient for the purpose of meeting all wants, is quite inaccessible, or accessible only in small quantities, to some, whilst others are able to procure it in large quantities. This, however, is due to the unequal distribution of income, and not to the fact that the commodity is one of the economic group.¹ In a communistic society all would have to restrict their consumption to an equal extent; but even in such a society restriction would be inevitable. For, if a equal the demand, and $a - b$ the supply, it is clear that, to the extent of b , the demand must remain unsatisfied.

It is no less clear—and this applies also to things of which the available supply is not too small, but just large enough—that no quantity, however small, of such commodities can be lost without creating a deficiency. Hence we are concerned about them, we store them, we are careful how we use them, we do not readily give them away, or if we do, we regard the act as a service rendered, as a sacrifice made—cheerfully made, perhaps, but nevertheless a sacrifice. We often endeavour by means of labour to fill up the deficiencies made in our stock by consumption or other causes. Of course the greater the difference between the demand and the available supply of a commodity the more all this will apply. Let the difference be ever so slight, however, it influences us in our views and treatment of the commodity concerned. How do we generally act with regard to water, or with regard

¹ It is strange that Menger in his *Grundsätze* (p. 59) should have overlooked this.

to the flowers that grow in the fields, or with regard to anything that exists in superfluity? How do people treat timber in districts where forests abound; or land in the Far West of North America? In the matter of commodities of which the supply greatly exceeds, and is likely to remain greatly in excess of, our requirements, we are all communists. We do not produce such commodities, neither do we buy or sell them, neither do we stint ourselves in using them. We simply take what we need of them, for nobody has any interest in preventing our doing so.

It may be thought, perhaps, that the distinction between economic and non-economic goods coincides with the distinction between manufactured products and gifts of nature. Apart, however, from the fact that it would be difficult to define what is meant by the latter expression—in a certain sense it includes all agricultural produce on unimproved land—we must bear in mind that many things which are unquestionably gifts of nature belong to the economic group of goods. Drinking-water, for example, though not generally, does nevertheless in some places belong to the economic group of goods. On the other hand it may, and occasionally does happen, that products of labour, sometimes of much labour, fall to the class of non-economic goods, as, for instance, houses in a deserted town. The group to which a commodity belongs will depend entirely upon the relation which exists between supply and demand, and not upon the manner in which the commodity has been obtained. There is scarcely a single article which may not, speaking in the abstract, pass out of the one group into the other. Things whose properties are only imperfectly known to us, and for which, therefore, there is but little demand, will sometimes, owing to some discovery or invention, be promoted from the rank of non-economic to that of economic goods. Through the increase in demand they suddenly become scarce where previously they had been superfluous. The same discovery or invention, however, may have the opposite effect on other articles.

§ 2

Value irrespective of Exchange

When an article belongs to the class of economic goods a definite quantity of it possesses *value*. We shall have to consider this word a little before proceeding any further. It is a word that has given rise to so much controversy and misconception, that some people have felt justified in advising that its use should be altogether avoided in an economic treatise. But one of the writers who has been most insistent on this point, W. STANLEY JEVONS, has failed to adhere to his own advice. In many of his later writings he refers to the value of things, thus proving that he cannot dispense with the word.

Nor can it be dispensed with. And even if it could, the expression Ratio of Exchange, which JEVONS suggests as a substitute, is the very last that should be recommended. Value and ratio of exchange express two conceptions between which we must distinguish carefully. The relative values of things exercise a great influence upon the ratio in which these things are exchanged for each other. We shall presently see, however, that there could be no such thing as exchange, but for the fact that different people attach different values to a given quantity of the same thing. But as there can be only one ratio of exchange at any given time in any given market, it is evident that value and ratio of exchange cannot mean the same thing. The causes which determine the rates at which things are exchanged for one another merit our attention in the highest degree; but before we can understand them clearly we must first of all be clear as to the value which things possess irrespective altogether of exchange. We may observe, in passing, that data for throwing light on this subject are to be found in the writings of JEVONS himself.¹

¹ They will be found in greater abundance, however, in the writings of MENGER, whose *Grundsätze der Volkswirtschaftslehre* (Vienna, 1872) is one of the best works on political economy which have appeared in the German language. See also Dr. EUGEN VON BÖHM-BAWERK, *Kapital und Kapitalzins* (Innsbruck 1889), Part II. pp. 135-248.

What do we mean when we say that we attach value to a thing? The expression may have a twofold bearing. It may have reference to a *class* of things. If we say that we place value upon air, sunshine, drinking-water, friendship, art, we simply declare that we regard them as goods. To value a thing implies that we are unwilling to be without it, and that we desire to obtain it. There is an intimate connection between the conceptions expressed by the words value and endearment, hence the twofold meaning of the words *carus*, *cher*, *dear*, *theuer*.¹ When we say that we attach value to art, we mean that we like art, and that we consider it a disadvantage to be deprived of the enjoyment which it affords.

The expression value may, however, be used in another sense as well, namely, that in which we use it with reference, not to a certain class, but to a definite *quantity* of things. This certainly is the sense in which we use the word when we say that air or water, for example, have no value. We do not mean that air and water can be dispensed with, but that we place no value upon a *cubic foot* of one or a *gallon* of the other. Frequently we attach great value to a certain kind of thing without attaching the least value to a definite quantity of it. On the other hand, it is self-evident that when a certain kind of thing is useless, any quantity of it, no matter how great, will also be useless. But if we are supplied with an article in such abundance as to make it belong to the class of commodities which we have called non-economic, a pound or a gallon or a cubic foot of that article has no value whatever.

When we make use of the word value, it is absolutely essential that we should state clearly whether we use it in relation to classes of things or quantities of things. There must be no room for the least uncertainty on this point; for it may sometimes be said with truth of one and the same thing, that it has value, and that it has no value. Speaking of air in general, we may say that it has value. But under ordinary circumstances no one would consider it a loss if the existing supply were to be diminished by a few cubic

¹ Dr. W. C. MEES calls attention to this in his very interesting paper entitled *Poging tot verduidelijking van eenige begrippen in de staathuishoudkunde*. See *Verslagen en Mededeelingen der Kon. Academie van Wetenschappen*. Afdeling Letterkunde, 2e Reeks, Deel VII.

feet. Thus we are equally justified in saying that air has no value.

We know that the term value in exchange is always used in relation to definite quantities, and never in relation to particular kinds of things. The value in exchange of coffee is that of a pound of coffee. It is our intention, therefore, to use the word value invariably in this sense, even when we are speaking of value irrespective of exchange. We would have it clearly understood that, in whatever connection the word may occur in the present work, it will always be used in relation to definite quantities. By value irrespective of exchange is meant the importance which particular commodities or quantities of commodities have acquired in our estimation through our recognition of the fact that we need them for the satisfaction of our wants.¹

From what has been said it will be clear that to attach value to a thing and to regard a thing as belonging to the group of economic goods are two ways of expressing the same thought. Things are goods because they are useful to us. They possess value because we can spare no portion of them. If their utility increases they acquire increased value; but if they become at the same time more abundant, their value diminishes and may even disappear altogether. The relation between the value which we place upon a pound of gold and that which we place upon a pound of bread is no index of the degrees of estimation in which we hold these *classes* of commodities respectively; it simply shows how far the extent of our requirements in the matter of gold and bread, viewed in connection with the existing supply of each, will cause us to regard it as an inconvenience whenever we lose, or as an advantage whenever we gain, a pound of either.

¹ This is Dr. MENGER's definition, and in the original reads as follows: "Die Bedeutung welche concrete Güter oder Güterquantitäten für uns dadurch erlangen, dass wir in der Befriedigung unserer Bedürfnisse von der Verfügung über dieselben abhängig zu sein, uns bewusst sind" (*Grundsätze*, p. 78). See also the definition given by VON MANGOLDT (*Volkswirtschaftslehre*, 1868, p. 132): "Der Werth ist die gewissen Gegenständen in Hinblick auf die aus ihrem Wegfall hervorgehenden Uebel beigelegte Bedeutung."

§ 3

Causes which determine Value

It now seems to be an easy task to show the causes which determine value. What advantage do we enjoy in the possession, or expect from the acquisition, of a definite quantity of commodities? Once we know the answer to this question, it seems as if no doubt could any longer exist as to what the value of that quantity must be. It seems as if, in order to ascertain that value, we had nothing to do but to arrive in some way at an estimate of the advantage. And this is really the case. But, in estimating the advantage conferred by the possession of a definite quantity of commodities, we are confronted by a difficulty to which we must now give our attention for a little while. In doing so, we shall have an opportunity of becoming acquainted with one of the simplest, but at the same time one of the most important of economic truths.

There is no enjoyment with which it is not possible for man to become satiated. We all need food and drink; but when once we have obtained sufficient of these to support our bodies and provide us with a few luxuries, we ask for no more. Clothing is indispensable; but those who have an abundant stock of clothing do not, as a rule, wish to add to it. Nobody desires an unlimited supply of a particular kind of commodity, and this is the very reason why it is possible for the supply of a commodity to exceed the amount required; there being always a limit to that amount, even though the limit vary.

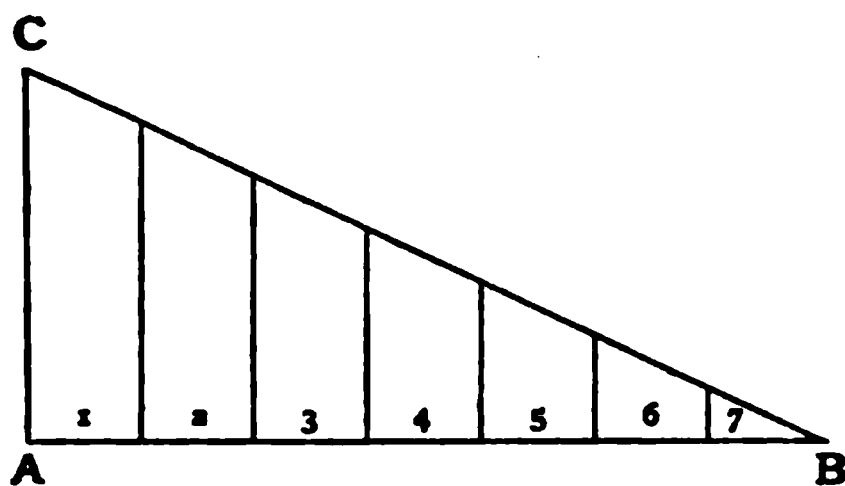
But it often happens that the point of satiety is only reached by degrees and not all at once. This is neither invariably nor inevitably the case. JOHN STUART MILL says, "There is no absurdity in the hypothesis that, of some given commodity, a certain quantity is all that is wanted at any price."¹ The hypothesis is anything but absurd; for every one of us could point to a number of such commodities in his own house. The person who has one piano, or one dining-table, or one lounge in his room does not, as a rule, want a second

¹ *Principles*, Book III. chap. viii. § 2, p. 355 (People's edition).

of any of these articles in the same room. There are other commodities, however, of which we would always be glad to increase our stock, and of such commodities the following can be proved to be true.

A certain quantity—say a pound or a gallon—of these commodities supplies an urgent want; our need for a second quantity is less urgent; for a third, still less; a fourth we can just manage to use; for a fifth we have no use whatever. We shall be able to recognise the truth of this if we consider that many articles are useful for a variety of purposes, and that these purposes are not all of equal importance. Water, for example, is used for drinking; but it is also used for watering plants and for washing. We use corn for making bread; but we also use it for making pastry and gin. Many things, again, are of use to us only in so far as they can be combined with certain other things. Should these latter become scarce, the reason which existed for desiring the things, in combination with which they could alone be used, gradually disappears.

Following the example of a writer whose name we have already mentioned — W. STANLEY JEVONS — we will now illustrate what we have been saying by means of a diagram. It must be clearly understood, however, that no part of our diagram is intended to represent a condition of things applicable to commodities of all kinds.



The line AB, divided into seven parts, may be taken to represent the stock of a certain article, and the spaces between the perpendiculars numbered 1 to 7 the advantages which accrue to a given individual from the possession of each part of that stock. The advantage diminishes steadily and ceases altogether at B. Were the stock to exceed AB the article would, as far as our imaginary individual was concerned, be classed among the non-economic goods.

We repeat once more that the actual condition of things is not necessarily such as described ; but such may be, and frequently is, their condition. It is perfectly conceivable that the needs of an individual may be equally great for each of the seven quantities represented in the diagram, and that an eighth quantity would have little or no utility for him. Unless this were possible, the relation between price and demand would sometimes be quite different from what it actually is. It must be admitted, however, that the case illustrated by our diagram frequently presents itself ; as frequently, perhaps, as the other, if not more so.

But still greater difference is manifested in the values which various persons attach to the same thing. "Every man," says RICARDO, "has some standard in his own mind by which he estimates the value of his enjoyments. But that standard is as various as the human character."¹ But it is not by human character alone that this variety is caused ; the needs themselves vary. One man can hardly find any use for that of which another man stands most in need. A household containing a large number of children will require certain kinds of provisions and wearing apparel for which there would be no use in a household composed of the same number of adults. A person who spends most of his time in his study will attach a good deal of value to a writing-desk ; whereas a person who hardly ever writes or reads will care little or nothing for such a piece of furniture. Let us recall what was said at the beginning of this chapter with regard to goods. The word implies a relation between ourselves and a particular thing ; it is not in virtue of their properties alone that things are goods, but in virtue of those properties as related to our wants. Things may be goods for one man and not for another. But in this relation there are degrees. A certain quantity of a particular article represents valuable goods for A, less valuable goods for B, and goods of still less value for C. The same difference might exist even if A, B, and C each held the class of goods to which the article belonged in equal esteem. For A might be absolutely without any, B might have a small quantity, and C an abundant supply of the article. In that case, each of them

¹ *Works* (M'Culloch's edition), p. 145.

would attach a different value to the acquisition of a definite quantity of the article.

There is nothing to prevent our treating a group of persons as a unit, and examining the position which commodities occupy in relation to that unit. If we do this, we shall see that the above diagram, depicting the position which they occupy in many cases in relation to the individual, must depict the position which they occupy in a still larger number of cases in relation to the group. And the truth of this statement is greater in proportion to the size of the group. It is possible to conceive of an individual attaching equal value to all the parts of which his stock of a commodity is composed; but this will not often be true of a society composed of persons of all grades and conditions, with all sorts of tastes and occupations. Of almost any stock of commodities which the society possesses, one part will be absolutely indispensable, a second will be greatly valued, and a third fairly acceptable. And the greater the inequalities in rank and income amongst the members of the society, the more regular the gradation will be, more especially if there be regularity of gradation in the scale of rank and income as well.

From this arises the difficulty of which we have spoken. The value which we place upon a definite quantity of a thing depends upon the utility we find in the possession of that quantity. But equal quantities of the same commodity may represent unequal amounts of utility for us. We value the utility of the first pound at 100, that of the second at 95, that of the third at 90, that of the twentieth at 5. What figure would represent the value which we will place upon any one pound out of the twenty? Or, to put the question another way, is the value which we place upon things based upon the utility of that part of our stock which is indispensable, or upon the utility of that part with which we could dispense with difficulty, or of that part which may be almost superfluous? This is the question for which we have now to find a definite answer.

The answer is readily found. The figure 5 represents the extent of the inconvenience that we would suffer by being deprived of one of the above 20 pounds. When the quantity

available has to suffice for the satisfaction of wants of different degrees of urgency, it is in the satisfaction of the least urgent of these wants that we will begin to deny ourselves, in the event of a decrease of the available stock. Were water to become scarce we should begin by exercising economy in the amount of it which we used for watering our gardens or for washing purposes. Not until we had economised in these respects, should we begin to exercise economy in the quantities which we used for drinking and similar purposes. The value of a definite quantity of a commodity, therefore, depends upon the *least* of the advantages resulting from the possession of that quantity. If we assume that stocks are accumulated by successive increments—an assumption that does not always coincide with fact—we may express what has just been said in the following terms: the value of things is determined by the utility of their last increment, their Final Utility, as JEVONS calls it, or their Marginal Utility, to adopt an expression used by other English writers, and having its equivalent in the German term *Grenznutzen*. The marginal utility would be the utility of that part of our stock of which we stood least in need, or which approached most nearly to the limit of our wants.

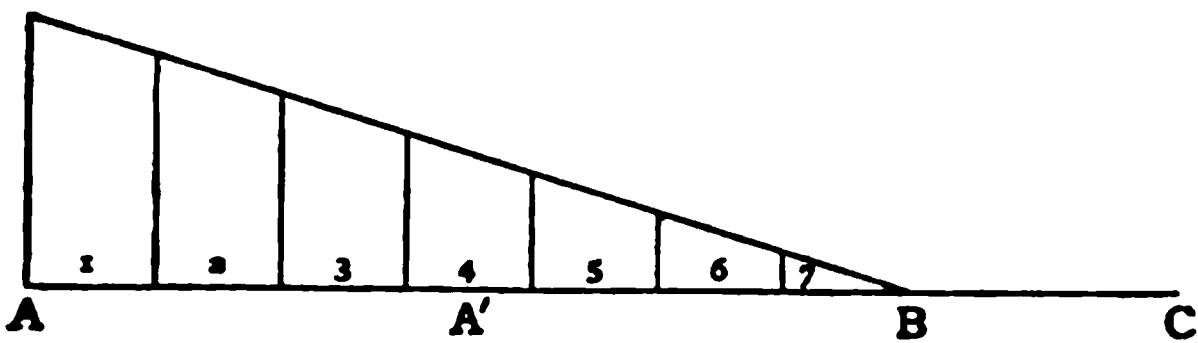
We now see once more that the value of a quantity of goods is not an exact measure of the importance which we attach to those goods as a class. The sum of the advantages which we derive from our stock of the goods in question may be very great, even though the last, or even the two or three last, of its increments be quite useless to us. On the other hand, the sum of the advantages which we derive from the enjoyment of a particular class of things may be small, and yet we may place a high value upon the last increment of our stock of those things. Take two articles, A and B. The first pound of A which we receive affords us advantages which we value at 100; the first pound of B affords us advantages which we value at 50. Suppose now that the advantages yielded by each successive pound diminished by 10 in the case of each article. We should then have the following state of things:—

	A	B
Utility of 1st lb.	100	50
„ 2nd „	90	40
„ 3rd „	80	30

		A	B
Utility of 4th lb.	. . . .	70	20
„ 5th „	. . . .	60	10
„ 6th „	. . . .	50	nil
„ 7th „	. . . .	40	„
„ 8th „	. . . .	30	„
„ 9th „	. . . .	20	„
„ 10th „	. . . .	10	„
„ 11th „	. . . .	nil	„

Suppose we already possess *nine* pounds of A and only *one* pound of B. The value of an additional pound of A will be 10, while in the case of B it will be 40. So that although A as a class is very much more useful than B—as shown by the estimated values of the first pound of each—nevertheless, a pound of B is four times as valuable as a pound of A. Or, suppose we have *eleven* pounds of A and *six* pounds of B, neither article will now have any value; but the one will yield us much more advantage than the other. The value of things per unit is an expression, not of the extent to which a *class* of commodities is indispensable to us, but of the extent to which a given *quantity* of commodities can be dispensed with. If the value of one ton of wheat is the same as that of two ounces of gold, it simply means that we estimate the disadvantage that would result from the loss of one ton of wheat at the same figure as we estimate the disadvantage that would result from the loss of two ounces of gold.

By bearing this in mind we at once see the absurdity of a proposition which has sometimes been put forward, that the wealth of a country would be increased if half of the wells and river-sources were to be dried up. Drinking-water, it has been maintained, would then acquire a value which it does not now possess. By slightly altering the diagram given on p. 55, we are enabled to use it for the purpose of confuting this wonderful doctrine.



Let the line AB represent the quantity needed for the supply of our wants, the line AC the quantity at our disposal, and let the spaces between the perpendiculars represent the utility of each of the quantities of which the stock AB is composed.

So long as the stock exceeds the amount required, that is to say, so long as the horizontal line beginning at the point A extends beyond the point B, the article will have no value; it will belong to the non-economic goods. But if the source of the supply be stopped, and the available quantity diminish until it reaches the point A', the article will acquire value, but mankind will not be made richer. The advantages represented by the spaces 5 to 7 now disappear altogether, and only those represented by the spaces 1 to 4 continue to be enjoyed.

"Many of the errors in political economy," says RICARDO,¹ "have arisen from considering an increase of riches, and an increase of value, as meaning the same thing." Far from meaning the same thing, the one expression sometimes means the very opposite of the other.

In proportion as things become more plentiful they diminish in value, and yet wealth consists in abundance. In order to have a high value, an article must not only be esteemed very useful owing to its qualities, it must also be scarce; that is to say, the available supply must fall far short of what would be needed to satisfy everybody's wants.

And in this we find the explanation of a well-known fact, viz., that the value of things diminishes when their quantity increases. This would appear quite puzzling—we ought rather to say, this would never be the case—if each new increment to a given stock were to afford the same amount of pleasure as the preceding increment. What would happen when the stock was increased would then be this: at first the article would retain its full value; but were the stock to keep constantly increasing, the article would suddenly lose all value; it would be transformed all at once from an economic—perhaps even a highly valued—commodity into a non-economic commodity. We do not go so far as to assert that such a course of things is inconceivable, but that it takes place very rarely—if indeed at all—is a matter of common

¹ *Principles*, chap. xx. ; *Value and Riches: their Distinctive Properties*.

knowledge. The depreciation arising from decrease of supply may be more rapid in the case of one article than in the case of another; but, as a rule, we find it to be more or less gradual. This would be simply inexplicable, were it not that in most cases each new increment to the existing stock possesses less utility—at any rate, for society as a whole—than did the increment which preceded it; were it not, in fact, that as the supply increased the marginal utility decreased.

§ 4

Value and Cost Price

We have now seen the sense in which the word Value has to be understood. But this brings us to another expression which requires explanation, viz. *Cost Price*. Exchange is such an important factor in man's activity for the satisfaction of his material wants, that at the mention of cost price our minds at once turn to thoughts of money and commerce. But just as things have a value apart from exchange, so also have they a cost price apart from exchange, and it is necessary that we should see clearly in what that price consists.

Cost price is the exact opposite to value; it is the sum of the sacrifices which we make in order to obtain a thing. Value, on the other hand, indicates the extent to which a thing presents itself to us as a commodity; the figure at which we estimate the advantages we derive from possessing it. But what is it that constitutes the price paid by mankind as a whole for the things which it acquires? This is a question which some economists have not taken sufficient pains to answer. Owing to exchange, the cost price of things often appears to be quite different from what it is in reality.

In the language of every day cost price indicates the sum-total of the disbursements which an *entrepreneur* has to make in order that he may procure a given quantity of commodities. As a rule, he treats all these disbursements, be they wages of workmen, cost of coal and fodder consumed, or what not, as items in the cost of pro-

duction. When he wants to ascertain the amount which his products cost him per pound, he adds together the various disbursements and divides the sum by the total weight in pounds produced. And from his own point of view he is quite right in doing this. For, whether he has spent £1,000 in wages and £500 on fuel and fodder, or whether he has spent £1,000 on the latter and £500 on the former, makes no difference to him, having regard to the object he has in view. In either case he must pay £1,500, and this is the only fact that possesses interest for him when he wants to know the cost price of his products. But the economist, when he is considering the conditions for promoting the welfare of society as a whole, has to be careful not to view things from the standpoint of the *entrepreneur*. Under no circumstances may he place wages on the same footing with fuel and fodder as part of the cost; he has to use the word cost in a much narrower sense when speaking of the price at which mankind acquires its income.

➤ In order to be able to grasp the sense properly, let us imagine a number of persons united in a co-operative society and producing material goods. One contributes capital and land; another, his knowledge; a third, his muscular strength, and so on. Accounts are settled at the end of the year. Now as to the cost. Many have had to draw something on account in the course of the year, being unable to wait until the net results of the joint undertaking had been ascertained, and it was found necessary to advance them as much as they would, according to an estimate, have been entitled to receive eventually as their share. Are these disbursements part of the cost? - Certainly not; they are portions of the jointly acquired income resulting from the enterprise. The only items that can be reckoned as part of cost are: corn used for sowing, live-stock that has perished, whatever has been used up in the enterprise itself, and depreciation through wear and tear. Let us now modify our hypothesis. The workers, who form a part of the society, demand a fixed wage in lieu of weekly payments on account, and the landowners demand a fixed rent. The result of this is, that the enterprise loses its co-operative character, as the risk will in future be borne by certain members of the society only. But this does not change the economic character

of what the workers and the landowners receive. That which is paid to them consists still, as it did before, of products of the enterprise.

We see, then, that what the *entrepreneur* regards as the *cost price* of his products is a very mixed sum. It certainly includes what would be the cost in the narrower, or social, sense of the word; but a great part, generally the greater part, of the sum consists of income and nothing else. A manufacturer who engages a workman at a fixed wage, invites that workman to assist him in creating a certain income. As the workman wants to know how much he may consume, the manufacturer promises him, not a certain percentage of the income which he is to help create, but so much per day or per job. When the manufacturer borrows a certain amount of capital at a rate of interest agreed upon beforehand, he deals similarly with the capitalist. To him also he gives a share of the income that is to be created, and here, as in the former case, the magnitude of that share is not uncertain, but determined beforehand. The *entrepreneur* has every right to reckon all these prearranged disbursements as part of his cost; but we know very well, and so does he, that they only make up the sum which he must pay out of the income he has earned, as recompense for the assistance afforded him in earning it.

The utmost confusion of thought results from a failure to observe the distinction between cost from the point of view of the *entrepreneur*, and cost from the point of view of society as a whole. Every *entrepreneur* attaches great importance to the cutting down of his expenses, and for the success of his business it matters not in the least whether this end be reached by the reduction of wages, or by improved methods of production. But from the point of view of the welfare of society, this is anything but a matter of indifference; for, a fall of wages means a reduction of the income of the most numerous section of the people, while improved methods of production mean an increase of useful commodities. We sometimes hear complaints as to the impossibility of carrying on a certain branch of industry in some particular country owing to the high rate of wages in that country. Doubtless, these high wages are an obstacle

for any one who reckons them as part of the cost of production, but we must be careful not to regard the interests of individuals as identical with the interests of the majority of the people. Whenever the successful carrying on of a particular branch of industry is found to be impossible, owing to high rates of wages, it simply proves that other branches of industry distribute a larger amount of wealth than it would be possible to create by means of this particular branch of industry.¹

We now return to the question, What is the price which mankind has to pay for the things which it needs? The price consists, not of wages, but of labour; not of interest on capital, but in the using of capital; not of profit, but of care and management. Wages, interest, and profit, speaking in the social sense, are not parts of the cost of production; they are parts of what is produced. They are not sacrifices, but things gained. If we want to ascertain the net as distinct from the gross income of society, we must not deduct from the sum total of commodities acquired the sums which the various *entrepreneurs* have disbursed as wages and interest; we must only deduct what has been spent for the purpose of replacing and maintaining commodities which have been wholly or partially destroyed in the process of production itself.

But, in their turn, these commodities are the fruits of labour, and so we arrive at the conclusion that labour, the trouble of production, is the sole price which mankind pays in order to be able to procure such things as it deems to be necessary. That is to say, the only *positive* price; for there is also a *negative* price, if such an expression be permissible. The negative price consists in abstinence from present enjoyment. Production, upon anything like a large scale, is impossible without instruments of production. Whilst we are labouring to acquire or to improve those instruments of production, it is impossible for us to be occupied with producing things to supply our immediate wants. These wants must, therefore, have been provided for beforehand; a stock must have been accumulated, and that stock can only be

¹ The reader should not fail to refer to J. E. CAIRNES' *Some Leading Principles of Political Economy* (London, 1874), pp. 46 *et seq.*

the result of thrift, or, at any rate, of abstinence. This abstinence meets with its recompense later on, but it is, none the less, a sacrifice made by those who practise it; a price, a negative price, if we must so call it, paid by man in order to obtain the commodities which he desires to possess.

Not only, then, do the expressions Value and Cost Price differ widely in meaning, but the one actually means the reverse of the other. Nevertheless, it is a well-known truth that the relation between the values of things in most cases corresponds pretty nearly to the relation between their respective cost prices. How is this to be explained? The reason is, that every one prefers to apply his labour to the production of such things as will afford him the greatest amount of enjoyment. Value is the *regulatrix*, so to speak, of labour. It determines the direction in which people shall labour; the objects to which labour shall be applied. Speaking very broadly, every kind of labour will be continued up to the point at which it becomes as remunerative as any other kind of labour. As a result of this, most commodities automatically acquire a certain value in relation to each other, which corresponds approximately to the proportion between their respective costs in labour.

An example may serve to make this clear. Suppose that in a certain country it requires exactly the same effort to produce half a ton of wheat as it requires to produce a ton of rye. The proportion in which the cost price of wheat stands to that of rye will therefore be as 2:1. Suppose now that the advantages which people expect to derive from equal quantities of wheat and rye in this particular country were as follows:—

					Wheat.	Rye.
Utility of a 1st quantity .	.	.	.	.	10	10
„ „ 2nd „ .	.	.	.	.	9	8
„ „ 3rd „ .	.	.	.	.	8	6
„ „ 4th „ .	.	.	.	.	7	4
„ „ 5th „ .	.	.	.	.	6	3½
„ „ 6th „ .	.	.	.	.	5	3

It is evident that at first rye only would be produced; for, in producing wheat, double the amount of labour would be required in order to procure the same amount of advantage. But this condition of things becomes changed as soon as four

quantities of rye have been obtained. The balance of advantage then lies in producing wheat, for the value of rye—which depends, as does the value of any other commodity, upon its marginal utility—will now have fallen from 10 to 4, and the proportion between its value and the value of wheat will be less favourable than 1:2. Not until three quantities of wheat have been procured, and the value of wheat has thus been brought down to 8, will there cease, according to our hypothesis, to be any advantage in extending the production of the one more than that of the other.

The connection between value and cost price, or value and cost of production, is frequently represented to us in a manner calculated to mislead. The value of things, as some people put it, *depends upon* or is *determined by* their cost of production. Such expressions, however intelligible to well-informed readers, are to be deprecated. Things do not derive value from the fact that they have cost labour; labour has been expended upon them *because* they have value. The value of commodities is not determined by the amount of exertion involved in their production, but by the amount of inconvenience arising from our being deprived of them. Our statement, as given above, seems more accurate. Instead, therefore, of saying that the value of things *depends upon* their cost of production, let us rather say that the values of commodities, of which the supply may be increased by labour, must, in the long-run, *coincide* with their respective costs of production.

There is much more to be said upon the subject which we have here just touched upon. As a rule the cost price of an article is not the same for each of the parts of which the total production of that article is made up. How much labour is spent in producing a ton of wheat? This will of course depend to a large extent upon the situation and quality of the soil in which the wheat is grown. How much labour is required for the spinning of a 100 bales of raw cotton into yarn? Less labour will be required for this purpose in a large factory than in a small one. Out of these dissimilarities arise complexities which will claim our attention later on. All we wished to do in this place was to explain the expression Cost Price, as used in its economic sense, and to indicate, in very general terms, the relation between Cost Price and Value.

§ 5

Value in Exchange

Up to the present we have in every case spoken of value apart from exchange. We will now deal with the subject of exchange, and begin by asking, What is its origin?

This question admits of a very simple answer. Exchange arises out of the circumstance that commodities are not always in the possession of those by whom they are most needed, and therefore most valued. ADAM SMITH has endeavoured to account for exchange by ascribing it to an innate tendency in man to barter. Experience, however, shows that this tendency never manifests itself under circumstances in which it would be disadvantageous to barter. Nobody barter a thing away unless he attaches a higher value to the thing which he receives in exchange for it. Our readiness to buy or sell particular things, therefore, is not at all times equally great; for things do not at all times possess the same value for us. When a person is engaged in a scientific inquiry he will sometimes place a high value upon books, to which, at other times, he would probably attach little value. A person happening to be in a desert will, if necessary, give golden ornaments in exchange for a drink of water. The desire to barter is not felt until a motive arises for bartering, and the moment that motive has ceased to exist the desire to barter disappears.

It was a long time before people could be brought to understand that both parties might benefit by an exchange. It is more especially in its application to international trade that the truth of this proposition is frequently denied. And yet it is easy to show that exchange must in all cases result in advantage to both parties, except when either party is labouring under a mistake. A has not enough of one article and too much of another. With B the case is reversed. Under these conditions exchange must be beneficial to both; for each gives away something he can do without for something he wants.

It is also a matter of controversy how far equal value is given and received in exchange. There is no more difficulty

about this question than there was about the last. Were you to attach just as much value to the thing that you are being asked to part with, as you do to the thing which is being offered you in exchange, you would only be giving yourself unnecessary trouble by exchanging. Therefore, in any exchange transaction which fulfils its purpose, the value of the thing received is always greater than that of the thing given. And this applies to both parties, because the value which each of them attaches to a given quantity of the same commodity is different. Equality can only exist between the values of what each of them gives, or between the values of what each of them receives, according to the estimate of the giving and receiving parties themselves. But though such perfect equality is possible, it is not necessary. Many exchanges take place by which both parties are indeed gainers, but one of them to a greater extent than the other.

The more the value of what we receive exceeds the value of what we give, the stronger our inclination to exchange. But as the value of the thing which we receive diminishes with every increment of our stock of that thing; and as, with each diminution of our stock of the thing which we give, the value of the remainder of that stock becomes greater, there arises a tendency, not towards absolute equality of value between what each of the parties gives and receives, but towards a constant lessening of the inequality of their values. Imagine two persons, both of whom have an equal liking for two articles. Suppose, however, that A has six quantities of No. 1 article and not any of No. 2; while B has six quantities of No. 2 but not any of No. 1. Suppose also that they both estimate the utility of the different quantities composing their stocks of these articles as follows:—

		Article 1. (Possessed only by A.)		Article 2. (Possessed only by B.)	
Utility of 1st quantity	.	.	100		100
„ 2nd „	.	.	90		90
„ 3rd „	.	.	80		80
„ 4th „	.	.	70		70
„ 5th „	.	.	60		60
„ 6th „	.	.	50		50

For A, a single quantity of No. 1 article will now possess a value

represented by the figure 50, and for B, a value represented by the figure 100. With respect to No. 2 article the conditions will be reversed. But after each exchange, this difference will diminish. For, after A has disposed of one quantity of No 1, the value which he attaches to the remainder of his stock will be represented by 60; after a second deal it will be 70; after a third 80. Meanwhile article No. 2 has been diminishing in value for him. So long as he had only one quantity of it, he valued that quantity at 100; but the second deal brought his valuation of it down to 90, and the third deal, to 80. After this deal, both articles possess an equal value in his eyes (also in the eyes of B), so that neither party has any longer anything to gain by continuing the exchange.

It frequently happens that one of the parties has an interest in continuing to exchange after the other has ceased to see any further advantage in doing so. In such a case, the former must make it worth the latter's while to continue the exchange. He must offer him more than he offered formerly for the same quantity of commodities, or else accept a smaller quantity of those commodities in exchange. And this applies also to international trade, which, as we shall see later on, consists chiefly of an interchange of commodities, and may, therefore, serve as an illustration here. Suppose a certain nation to have been in the habit of exchanging x industrial products for y food products. Owing to some invention, this nation has been enabled to procure $2x$ industrial products with the same amount of labour, etc., previously needed in order to procure x . It will now be able to make the ratio of exchange more advantageous to the nation with which it has trade dealings, and at the same time continue, itself, to profit by the exchange. It will be able, for instance, to offer $2x$ in exchange for $1\frac{1}{2}y$, so that the ratio is no longer $1x = 1y$ but $1x = \frac{2}{3}y$. When we exchange, we always aim at obtaining possession of something which we value more highly than what we ourselves can supply; and not until it becomes impossible to fix a ratio, under which both parties can attain this object, do exchange transactions cease to take place.

Exchange has an influence upon our valuations of things. It changes the standard of our valuation in many cases. It has the effect of making us value some things more highly

and others less highly than we should do if there were no such thing as exchange. For instance, a commodity for which we have little or no need ourselves, acquires increased value in our estimation as soon as we learn that it is much sought after by others. In such a case we realise that the commodity in question may be of service to us in another way than in the supplying of our own wants. We see that we can offer it to those who need it more than we do ourselves, and who will, therefore, be glad to offer in exchange for it something which we either do not possess at all, or of which our supply is very limited. Whenever exchange is possible we no longer value the commodities in our possession according to their own utility for us, but according to the utility of the things which people are willing to give us in exchange for them. The degree of our anxiety to retain, or of our willingness to part with, our commodities is then no longer determined by the small amount of pleasure which they would be capable of affording us were we to use them or consume them ourselves, but by what they represent for us as means for procuring something else, from the possession of which we expect to derive more pleasure. Value represents the *direct* importance of a thing for us; owing to exchange, things have an *indirect* importance as well.

Of the two, the latter will always preponderate before we offer a thing in exchange. A man in easy circumstances does not sell his books, or furniture, or paintings, so long as they afford him as much pleasure as they did at the outset. But a man whose circumstances have undergone a change for the worse will sometimes do so; and when people have sunk into extreme poverty we sometimes find them offering to sell articles which they would never have thought of parting with in their better days. In cases like these the direct importance of the articles has remained the same, but that of the things obtainable in exchange for them has been considerably enhanced owing to the fact that these have become scarce with the owner of the books, etc. A poor man, who sells a woollen blanket in the winter, does not show by this that he is less desirous than he was before of possessing a woollen blanket; he simply shows that he has not enough money wherewith to buy bread or to pay rent. Were he, at the moment when he was about to sell his blanket, to receive

a liberal donation, he would at once change his mind. The indirect value of the object would have fallen again below its direct value, and no motive for exchange would any longer exist.

But frequently exchange also lessens our appreciation of things. Everybody makes daily use of certain objects which are of the utmost necessity for him; the loss of which, however, would trouble him very little, owing to the fact that the things may be bought for a trifling sum. Here the low valuation is due to the same cause as was the high valuation in the former case; namely, that our standard is not the utility of the things themselves, but the utility of something else. Owing to the system of exchange, there is an abundant supply of these things within reach, in addition to the stock which we already possess. We have only to pay a certain sum of money in order to be supplied with as much as we want of them. The extent, therefore, to which we are inconvenienced by the loss of the things is not determined by the pleasure or advantage which they afforded us, but by the pleasure or advantage which we shall have to forego in parting with the things which are required in order to purchase them. If the advantage or pleasure which we shall thus have to forego be small, so also will be our estimate of the things to be purchased. This standard of valuation ceases to be applicable if, from any cause, our source of supply be cut off. But then the inconvenience which we would suffer from the loss of the thing itself would be much greater; for in this case we should value it according to its own utility, and this utility might be such as to render the thing an absolute necessity.

It was stated in the introduction to this work that our view of the general requisites for material welfare is modified by exchange; and here, already, we have had an illustration of the fact. In a society in which no exchange took place, all things would be valued solely according to their direct importance; that is, according to the pleasure or advantage to be obtained from a given quantity of them; or—to employ once more the technical expression with which we shall have to become familiar—according to their marginal utility. In society, as at present constituted, things are often esteemed according to their *value in exchange*; that is, according to their

importance as articles of commerce. Nevertheless, though we may not always be aware of it, the other standard of valuation is preserved, and is applied in every exchange. For every exchange is based upon comparison. We compare the pleasure or advantage which we shall be able to derive from the possession of the thing which is being offered to us, with the pleasure or advantage which we actually derive from the thing asked from us in exchange; and the conclusion at which we arrive depends upon the result of this comparison.

§ 6

Causes which determine Value in Exchange

We have only to follow up the thought just expressed, and to connect it with what has already been said, in order to learn the causes by which, in general, the value in exchange of things is determined. In every exchange two points come under consideration, the value of the thing we get and the value of the thing we give. We know how the first of these values is regulated. When certain quantities of an article are offered to a group of persons in the way of exchange, all the members of the group are not equally anxious for the possession of the article. One needs it very urgently; another, less; a third, scarcely at all. But the value in exchange of the same article in the same market must be the same for all equal quantities of that article. In the case of a given supply in the market, therefore, the value in exchange will depend upon the smallest marginal utility which the article possesses for any one amongst all those who are to be its purchasers in the event of its finding a sale. The law which governs the value of things apart from exchange is fully applicable in this case.

Of necessity this must be so. Suppose a country where a hundred persons are disposed to buy a definite quantity of an article, and that the first person is prepared to pay if necessary £100 for it, the second £99, the third £98, and the hundredth £1 only. Were a hundred such quantities to be offered for sale in that country, it is clear that they would only find purchasers at the price of £1 per quantity. For, at a price of £2, the

hundredth person would withdraw. It is true that all the other buyers would now effect their purchases on very profitable terms, and that this might tempt some of them to buy more than a single quantity, even at a higher price than £1. This may prevent the value in exchange of the article from falling too low. But were such a thing to happen, it would by no means disprove the proposition stated above. It would show that the minimum utility which one of the hundred quantities of the article possessed for the group, was greater than we had been assuming; not that the value in exchange of the article was not determined by such minimum utility.

It may even happen that different persons assign equal utility to one and the same thing, and that one of them may yet be willing to give much more for it than the other.

For, the value in exchange of things—to recall the second of the two points mentioned above—depends not alone upon the advantages which we expect to derive from their possession, but also upon the advantages which we relinquish when we purchase them. We attach a value not only to the things acquired, but also to the things given in exchange. If different persons attach the same value to one and the same thing, but differ in their estimates of the sacrifice to be made in order to obtain it, the one will be willing to give more for it than the other.

The richer we are, the less value, as a rule, do we attach to a given sum of money.

This is proved by everyday experience. A millionaire would not be greatly distressed by the loss of £10, whereas an artisan would feel such a loss very keenly. A man in easy circumstances would not be greatly elated if he were presented with half-a-crown; a servant, however, would accept it with gratitude. If a man be fortunate enough to possess an abundance of worldly goods, he suffers no privation in parting with a small portion of them; when he possesses little, the merest trifles are of consequence to him. A man who has an income of £600 per annum and spends £100 on house rent, still has £500 to spare for other purposes. Were a man with £150 per annum to spend the same sum on house rent, he would only have £50 left for the purchase of food, clothing,

and anything else that he might require. It follows that the spending of £100 does not represent the same sacrifice for everybody. For one it would mean very little; for another very much. For a rich man it would mean putting by somewhat less; for a poor man—supposing that he had such a sum to spend—it would mean being deprived of many of the comforts of life.

If we bear this in mind, we shall see that when the quantity available of a thing increases, its value in exchange—however that value may be expressed—must diminish to a much greater extent than its direct value. For, upon the latter only one cause is operating to produce this effect; viz. the diminishing utility of each successive addition to the existing stock of the particular article. Upon the value in exchange, however, an additional cause is operating in the same direction, viz. the difference in the estimates of the sacrifices. Before we can fully realise how this difference operates, we have to consider that the rich are a much less numerous body than the merely well-to-do; that the latter, in their turn, are much less numerous than the class immediately below them in the scale of wealth, and that the poorest classes outnumber all the others put together. Calculations of social income have often been made, and from these we learn that the lower we descend in the social scale, the larger the population we find. Rothschilds are counted by tens, labourers by millions. As it depends in a great measure upon the purchasing capacity of the individual, how much he is prepared to sacrifice in order to obtain a given article, and as the purchasing capacity of the most numerous section of the population is the smallest, it follows that an article can have a high value in exchange, only when the quantity of it offered for sale is relatively small. If we want to find a sale for a larger quantity of it, we must look for our purchasers among the less wealthy classes of citizens, and with each increase in the quantity which it is desired to sell, a step further must be made in the same direction; until at length we reach the class which is very numerous, but has a very small purchasing capacity, and can therefore only afford to pay a low price.

We do not propose just yet to go fully into the causes which determine value in exchange. We may add, parentheti-

cally, that these causes are remarkable for their diversity. From the foregoing, however, we are able to deduce a proposition which may be of much service to us in the further treatment of our subject. If it be true that, in most cases, things become less valuable in exchange according as they become more abundant; in other words, if it be true that, as a rule, a given price does not hold out to everybody an equal inducement to purchase, and that, in many cases, it actually fails to hold out any inducement whatever to do so, then it must also be a very general rule, that the demand for a thing depends upon the price that is asked for it.

The demand for a thing consists not only of the desire to obtain it, but also of the readiness to sacrifice something to the gratification of that desire. If certain people are prepared to sacrifice much, while others are willing to sacrifice only a little, in order to obtain the thing which they want, then the demand for that thing, far from being independent of the price asked for it, has the closest possible connection with that price. The proposition which we wish to prove may, therefore, be stated in the following terms: Whenever given quantities of an article, or given quantities of the thing which is being asked in exchange for it, are variously valued by different people, the demand for that article will increase or decrease according as the sellers prove yielding or exacting in respect to the price. In other words, whenever the condition here assumed is fulfilled, the marketable quantity of an article will be regulated by the price of the article; less will be sold if its price be increased, and more if its price be reduced.

As we proceed with our inquiry we shall see how frequently this condition is fulfilled, and how seldom it happens that all those to whom a commodity is offered are prepared to give the same amount of money, or labour, or goods in exchange for it. The unequal marginal utility of things furnishes us not only with the key to the explanation of exchange, but also—being such a common phenomenon—with solutions for most of the problems connected with exchange.

§ 7

Value in Exchange and the Distribution of Income

It has not been our aim in presenting these views to establish certain general conceptions or rules as a basis upon which a theory of the whole system of value in exchange might be built up. Our object merely was to make the reader more or less familiar with the subject-matter of this part of our treatise; to enable him to understand the meanings of some of the terms which will constantly recur, and above all to make it clear to him that things possess value irrespective of trade and barter.)

We have a few final observations to make as to the direction of the inquiry upon which we are about to enter. It has already been pointed out in the introduction, that every attempt to explain exchange is also an attempt to explain the distribution of social income. By social income we mean the sum-total of economic goods which a nation has at its disposal in a given period of time; the net result of the productive labour of the nation during that time. The proportion in which that income is distributed depends upon various causes. But whatever affects the value of things in exchange occupies a prominent place amongst these causes. For, if a person sells the things he has produced, the recompense which he receives for his labour will be determined by the value of the things which he receives in the way of exchange. If the goods which he has to offer be valued highly, he receives much; if but little value be placed upon them, he receives little. Thus the value in exchange of his products is one of the factors for determining his share of the general income.

The fact that an inquiry into exchange is also an inquiry into the distribution of income becomes still clearer to us when we remember that services as well as commodities have a value in exchange. What is rent? The landowner, instead of cultivating his land himself, leases it; that is to say, he permits a certain person to use his land, thereby rendering that person a service. This service possesses a value which is expressed as rent. What is interest on borrowed capital? What are wages? A capitalist, instead of applying his capital to his own personal use, transfers it temporarily to

another. The labourer, instead of applying his labour to objects intended for his own personal use, places his time and energies at the disposal of an *entrepreneur*. These services possess direct value for the person to whom, and therefore value in exchange for the person by whom, they are rendered. An inquiry into the causes which determine the magnitude of this value in exchange is also an inquiry into the rules which, under the influence of commercial intercourse, regulate the distribution of the social income amongst the various classes of society.

“The aggregate production of the whole of society,” says Dr. W. C. MEES in Part II. of his *Overzicht van eenige hoofdstukken der staathuishoudkunde*,¹ “forms, as it were, a large common fund towards which each person engaged in industry furnishes his contribution, and in the disposal of which each contributor has a share. The amount of each person’s share depends upon the value of his contributions; the classes of objects comprised in his share depend upon his own selection. The distribution is effected by means of exchange, or, what is the same thing, by means of buying or selling. Each person sells his contribution for a stipulated price, and thus brings it into the common fund. He is free to lay out this price in the purchase of such of the contributions of others as may commend themselves to his tastes.

“Were industry so organised that the articles which each person produced by his own unaided labour could be immediately placed in the market by the producer himself, the whole matter would be very simple. The income of each individual would then be represented by the sum-total of what he produced. To whatever extent the value of what he had produced exceeded the value of what others had produced, to that extent precisely would his income exceed that of others. . . . But the actual organisation of industry is very much more complex. The things which are placed in the market are usually the products of industrial activity extending over a considerable period, and shared in by many. To a great extent these articles represent, as regards those who place them in the market, little else than capital; not their own production, still less their own income.”

The distribution of commodities depends, therefore, not only

¹ Amsterdam (1866), p. 46.

upon their relative value in exchange, but also upon that of the services employed in producing them; that is, upon the rent of land, the rent of houses, the interest on capital, the profits of *entrepreneurs*, and the wages of labour. For these express the values of the services which they represent, not only in relation to the commodities, but also in relation to each other.

We propose to deal first with the value in exchange of services, later on with the subject of the money prices of commodities. The most important questions bearing upon the money prices of commodities have to remain unanswered until we have become acquainted with the causes which determine the value of services in exchange. But even while we are engaged in tracing these causes, the answers will become apparent to a great extent.

CHAPTER II

THE RENT OF LAND

§ 1

The Source and Nature of the Rent of Land

IN accordance with the plan which we have mapped out for ourselves, we shall begin by inquiring into the rent of land. In speaking of land, we refer exclusively to land used for the growing of crops or for pasture, not to land used for building purposes. In the next chapter we shall be dealing with the rent of houses, and shall then have an opportunity of saying all that is needful concerning building land, the rent of which is usually incorporated in that of the houses. This fusion of agricultural rent and house rent often occurs in the case of rents for arable and pasture land as well. Whenever a farm includes a dwelling, the rent covers payment for everything of which the tenant is allowed the use, including the dwelling and the barns. It would frequently be no easy matter to distinguish with arithmetical precision between the two factors, rent of land and rent of house, which together make up the sum payable by the tenant to the landowner. But granting that such a calculation would sometimes be difficult, there can at least be no doubt that the tenant would have declined to pay for the mere use of the land as much rent as he has agreed to pay for the land and farm buildings together. The best method, it seems, of ascertaining the rent of the land itself in such cases is to ask what rent the tenant would pay for the land supposing that he were himself the owner of the farm buildings which have been erected upon it. The difference

between the sum which he would pay under such circumstances and what he actually does pay, would express the rent of the buildings.

We shall presently be going fully into the origin of rent and the causes which bring about a rise or a fall of rents; but we must first of all establish quite clearly what we mean when we speak of the rent of land. To some extent this has already been made clear by the foregoing, but a few additional observations are necessary.

It has already been stated in the introduction, and we now repeat, that the rent actually paid does not in all cases represent the full competitive rent; that is, such a rent as the landowner could secure by acting on strictly commercial principles, like the stockbroker, for instance, when he is operating on the stock exchange. The landowner, more especially if he has acquired his land by inheritance and not by purchase, seldom acts entirely on such principles. The relations between him and his tenants are other than merely commercial. He desires that the people who are settled upon his land should be prosperous. He may wish to secure their support for some political purpose. In many countries the ownership of land is a sure means of acquiring influence. But a landowner would profit little by this means if, by neglecting to take an interest in the concerns of his tenants, he failed to inspire them with a personal liking for him.

There is another reason why the rent actually paid does not in every case correspond to the full competitive rent. In many cases farms are leased for a number of years at a stretch. In Scotland, for instance, leases of twenty-one years are very common. In Sicily, we find leases of twenty-nine years and longer, the tenant undertaking to plant fruit trees.¹ Where such agreements are entered into, the full competitive rent of the land—the “rack rent”—may alter considerably, while the rent actually paid remains the same. It is exceedingly important that we should bear this in mind, lest every conclusion regarding the former, and deduced from economic inquiry, be pronounced applicable to rents which are actually being paid.

Land, like everything else possessing value, owes its rental

¹ *Contratti a miglioria*. See S. Sonnino, *I contadini in Sicilia* (Florence, 1887), pp. 157, 167.

value to the useful qualities which it possesses. These qualities may be summed up in the one word—fertility. Much of the land owes its fertility almost entirely to nature. Other land, however, owes it in a great measure to labour. Through irrigation, constant manuring, and various other kinds of labour directed towards the improvement of the soil, many lands which would otherwise have been of little use have acquired great utility, and have therefore become capable of yielding a high rent.

Some, including the American writer CAREY, have gone so far as to maintain that the land, taken as a whole, is incapable of yielding any rent except in so far as useful properties have been conferred upon it by labour. This is obviously an exaggeration.¹ The land comprised in Holland has, according to the most recent estimate, a rental value of £8,000,000, and, therefore, a purchase value not far short of £250,000,000. CAREY would, therefore, have to prove that labour to the value of that sum had been applied in order to render the soil of Holland fit for cultivation. It would be difficult to prove this. There are no statistics showing all that has been spent from the earliest times upon land improvements in Holland. But even if such statistics were to be had, they would, in all probability, show a much lower figure than £250,000,000; for land has increased remarkably in value in the course of the nineteenth century. As nobody will deny that this increase in value exceeds by far the amount that has been spent during the same period upon the improvement of the land, it follows, if CAREY's contention be true, that, before it began to rise in value in this century, the soil of Holland was worth less than had been spent upon it. This is equivalent to saying that, taken one with another, those who have laid out capital upon the improvement of the land must, up to a comparatively recent time, have been working at a loss, at a considerable loss, in fact. This is an assumption which cannot be entertained. In any case CAREY's statement is a mere assertion, as there is no evidence to support it.

It may, however, be conceded without hesitation that there are few land-areas that are not indebted to human labour for a part at least of the properties which give them

¹ As shown by JOHN STUART MILL, *Principles*, Book II. chap. xvi. p. 260.

utility. Some people have found in this a reason for regarding what is commonly called rent as being made up of two distinct factors, namely, real rent, or rent in its narrower sense, and interest on capital. They would include under the former head only those things which are yielded by the original properties of the soil; the rest, they say, should be regarded as interest on capital. They argue as follows: A field yields £20 per annum to its owner; if nothing had been done to improve it, the field would only yield him £15. The difference, amounting to £5, is not rent in the strict sense of the word, but interest on the capital laid out in improving the land. They readily admit that it would be impossible to show in every case what portion of the so-called rent was true rent and what portion interest on capital; but this does not weigh with them as a reason for not making the distinction.

We object to this distinction, however. It must lead to the erroneous supposition that the causes which make rents rise and fall operate upon a part of the rent only, and that, irrespective of these, the causes which determine the rate of interest on capital exercise an influence of their own upon the rent. But it is a matter of common knowledge, and has never been disputed, that when there is a fall in rents coincidently with a rise in the rate of interest, the whole of the rent falls, and we do not find one part of it going up and the other down.¹ What can be said then in favour of maintaining this distinction, and whither can it lead if not to misconception?

No. The sources of rent are different, it is true, and we shall do well to bear this in mind; but the nature of rent is always the same. Whether it be its own natural properties or human labour that has rendered the land suitable for cultivation or for stock-rearing, as soon as there is an increased

¹ Those who make this distinction—as for example TH. MITHOFF in his article headed “Grundrente” in the *Handwörterbuch der Staatswissenschaften*—quote the words of RICARDO, who says: “Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil.” But this passage, in which the author certainly did not express himself quite correctly, has to be taken in conjunction with those which succeed it. It then becomes quite clear that by “original and indestructible powers of the soil” RICARDO meant the soil itself, as distinct from such things as manure, irrigation, trenches, hedges, buildings, in short from whatever either serves exclusively for the next harvest or is capable of being removed from the soil.

demand for productive land such land will become capable of yielding more rent. It is a common thing to say that capital has been invested in improvements, but the expression is quite inappropriate. Capital, when applied to the improvement of the land, is not transferred or transformed; it ceases to exist. Capital consumed in this way cannot, of course, be set down as a loss, for there is a gain from the increased utility imparted to the land; and this gain corresponds exactly to what has been consumed in the shape of capital. A nation that spends capital on increasing the productive powers of the soil will own less capital, but better land. But those who say of capital applied to land that it "yields an interest" make use of an expression which, strictly speaking, is not accurate. Capital which has been consumed can no longer yield any interest. Improved land may yield more produce, and that is what takes place in this case.¹

A distinction is made in common parlance between net and gross rental value. The owner of a piece of land has frequently to spend part of the rent which he receives on keeping his property in good condition. The Dutch Law of 1879 on the revision of the assessable incomes from landed property for the land-tax calls the part of the rent so spent "necessary expenses of maintenance," amongst which it does not include interest on mortgages. If we regard things from the standpoint of the landowner, we find that there is very good reason indeed for distinguishing between the gross income which he can get by the leasing of his property and the net income which he draws after deducting the "expenses" just referred to. We must not forget, however, that the gross income is the real rent, and that the cost of maintenance is only a price which the owner has to pay in order to secure the enjoyment of his income. Even when regarded from this standpoint, however, the rent does not appear to be made up of two parts; but, just as its source is twofold, so also, in most cases, is its destination. Part of the rent is usually destined, not for the enrichment of the owner, but for the preservation of his property against decline in utility, or for the payment of certain charges adhering to it.

¹ See what Dr. C. MENGES very rightly observes upon this point in his *Grundsätze der Volkswirtschaftslehre*, pp. 145, 146.

§ 2

**General Causes which determine the Magnitude of Rent :
Ricardo's Theory**

The rent of land is the income which the owner of the land can obtain by letting it.

What are the causes which determine the amount of that income? To this question DAVID RICARDO has supplied an answer remarkable for its clearness. In substance it is as follows:—

A colony settles in an uninhabited country. There is more land than the colonists require, so that nobody has to pay any rent for the use of it. But this state of things will change as the population increases. Suppose that there are three qualities of land. The best quality we will call No. 1. At first none but this quality is cultivated. The second quality of land (No. 2) is not put into cultivation until it has been found that No. 1 is no longer able to provide for all requirements. Now, from the moment that people have begun to cultivate No. 2, No. 1 yields rent, and the amount of this rent can be accurately indicated. Suppose that an acre of the best land yields 100 measures of wheat, and an acre of the second quality 90 measures only. It will now be immaterial to a cultivator whether he gets an acre of No. 2 land rent free, or whether he pays a rent of 10 measures of wheat for an acre of the best land. The population increases still further, so that the first and second qualities of land are no longer capable of supplying the needs of the people, and it is found necessary to begin cultivating the third, or most inferior quality of land, which produces, say 80 measures per acre. The result will be that land No. 1 will be able to fetch a rent of 20 measures, and land No. 2 a rent of 10 measures, per acre. For, whether a man had the free use of an acre of the land which produced 80 measures, or whether he paid a rent of 10 measures for an acre of land producing 90 measures, or a rent of 20 measures for an acre of land producing 100 measures, the advantage to him would in each case be the same.

Here we have, according to RICARDO, a rough explanation

of the origin of the rent of land and of the causes upon which, generally speaking, the magnitude of that rent depends. The land is a gift of nature. If it existed in the same abundance as air and water, all would be able to avail themselves of it to the extent of their needs. In most parts of the earth, however, the condition of things is otherwise. As population increases, good land becomes scarce, and recourse has to be had to inferior land in order to avoid famine. As time goes on, worse and worse qualities of land have to be brought under cultivation, and with each successive step in the downward scale the rent of such land as has already been brought under cultivation becomes higher. It follows, therefore, that the rent which a given area of land can yield is the difference between the produce of that land and the produce of an equal area of the most inferior land which it has been found necessary to bring under cultivation.

But is it always necessary to have recourse to land which is less productive than that already under cultivation? Is it not possible to apply more capital and labour to the good land? Certainly, this is possible, and is frequently done, as shown by the large amount of land left out of cultivation in every country, and by the increasing prevalence of what is known as intensive cultivation. But experience shows that the new quantities of capital and labour which are applied to old land never bring about a proportionate increase of produce. Here we have a manifestation of what is usually spoken of by English writers as the Law of Diminishing Returns. Suppose that a first quantity of capital and labour applied to an acre of land No. 1 produces 100 measures of wheat, a second and equal quantity will produce say 95, and a third 90 measures. The same advantage will now be gained whether a third quantity be applied to land No. 1 or a first quantity to land No. 3, and presently it will be even more advantageous to cultivate virgin soil. Were it not for the law of diminishing returns, it would be possible to make a single acre of rich land produce enough to supply the wants of a whole country. From the fact that agriculture and stock-rearing occupy so large an area of land, and that this area becomes more and more extended as population increases, it is obvious that we have to reckon with the law of diminishing returns.

2 As soon as ever a reason arises for applying a second quantity of capital and labour to land No. 1, this quality of land yields a certain amount of rent. For it will now be equally advantageous to a person owning such land either to apply to it this second quantity of capital and labour, and thus obtain 95 measures of wheat from it, or to take an acre of new land of the same quality (which, according to our supposition, yields 100 measures) and pay a rent of 5 measures for it.

But there is another cause of rent besides inequality of productive power. Some land is quite close to the market, while other land is situated at a great distance from it. The man who rents the one will have to expend a great deal more labour, or to pay a great deal more for labour, in order to get his produce to market than the man who rents the other. These lands will not fetch the same rent.

2 Difference in situation as well as difference in productive power must therefore be taken into consideration. Were the whole of the land in the country where our colonists have settled uniformly good in quality, it might still admit of division into classes from the point of view of difficulty or facility of access to market. The land which was most favourably situated in this respect would be the first to be cultivated, then the land that was one degree less conveniently situated; and, according as it became necessary to cultivate the more remotely situated areas, those already brought under cultivation would yield higher rents. We need not, however, trouble ourselves to prove that difference in productive power is a much more permanent cause of inequality of rent than is difference of situation. For, owing to the spread of population, markets frequently become established in districts where none previously existed.

3 The Ricardian theory of rent, of which a rough outline has just been given, is simply an application of the well-known truth that a thing acquires increased value in proportion as the want which it supplies becomes more urgent. Land is necessary in order to obtain food-stuffs and raw materials. People will be willing to pay something for the use of that land if it produces more than is produced by land that is to be had for nothing. And the maximum of the payment will be

the difference between the net produce of the two lands. By cultivating land A we get 100; by cultivating land B we get 95; and B *has* to be cultivated, otherwise there will be shortness of supply. The advantage of cultivating A will therefore be 5, and the man who owns A will get that advantage whether he cultivates the land himself or whether he leases it to another.

This is the substance of RICARDO's theory.

§ 3

Objections urged against the Ricardian Theory of Rent

Objections have been urged against this theory which we will state and answer.

First, it has been asked, what grounds had RICARDO for assuming that the best land was always the first to be brought into cultivation? This, it has been said, is an historical assertion which requires historical proof. It was more especially CAREY, the American writer, who insisted that it was impossible to adduce such proof.¹ According to this writer, people have in most cases begun by cultivating the highland districts, and have not brought the more fertile soil of the lowlands into cultivation until afterwards. CAREY takes much pains to prove his contention historically.

Assuming that he has succeeded in doing so, what has he proved? The land first brought into cultivation is of the quality which produces, say, 90 measures of wheat to the acre. But after a time the whole of the available area of this land has been taken in, and land areas capable of producing 95 and 100 measures per acre respectively are brought into cultivation. When all three qualities of land have been brought under the plough, it will be equally advantageous for a farmer to pay a rent of 10 measures of wheat for an acre of the most productive land, or a rent of 5 measures for an acre of the second quality, or to cultivate an acre of the third quality of land without paying any rent. In other words, the time that must

¹ First in his work entitled *The Past, the Present, and the Future* (1854), and afterwards in his *Principles of Social Science* (1859).

elapse before all the land that is better than the worst land shall have begun to yield rent is longer, but there is no difference, either in the origin of that rent or in the causes which determine its magnitude. In fact CAREY's objection has no weight. We might very well admit RICARDO's proposition to be historically incorrect without being bound to reject one particle of his theory.

But is RICARDO's proposition historically incorrect? There is a great deal of truth in what has been said by Professor GREVEN¹ as to the much too limited sense in which CAREY uses the expression "productive land." "If by productive land we mean the land on which the spontaneous development of organic substances is the greatest, then CAREY's objection against RICARDO is valid. But RICARDO meant something different. He started from the hypothesis on which the whole of the science of economics is based, namely, that people will always endeavour to attain their ends by methods involving the least amount of expenditure and effort, and will choose the way by which they will be able to obtain the greatest results with the least labour. It follows, then, that in the matter of land cultivation they will first use such land as will yield the greatest amount of produce in return for the least amount of labour. Afterwards, as the population increases and more produce is required than can be obtained from the land hitherto cultivated, the people will gradually take to cultivating land on which the proportion between labour and produce is less favourable. Now RICARDO erred in expressing this fact in such a way as to imply that the land areas newly brought within the sphere of cultivation would always be less fertile than those already under cultivation. This will be so in many cases, but not in every case. Equally fertile or even more fertile land than that actually under cultivation may be left untilled because the cost of turning it into cultivated land would be too great. This explains why colonists mostly settle in the more elevated and less productive districts. The land bordering upon the rivers may be of a more productive sort; but were the colonists to set about converting marshes into arable land they would obtain

¹ In his academic thesis entitled *De ontwikkeling der bevolkingsleer* (Leyden, 1875), p. 32.

less produce in proportion to the labour expended. It is quite possible, too, that the land, once reclaimed, would yield such an amount of produce as would compensate amply for the labour expended upon it, but that, through lack of capital, the people are unable to devote labour to an object which can only be realised after the lapse of years. This will certainly be frequently the case; but it is to be noted that the postponement of cultivation is caused, not by insufficiency of labour due to scarcity of population, but by want of capital . . .”

“The way in which RICARDO uses the word fertility may therefore give rise to misconception; but if the word be understood to imply all the advantages which land of one kind can yield above land of another kind, then his theory is incontrovertible.”¹

A second objection urged against RICARDO'S theory is, that the very worst land under cultivation yields some rent, however little. This objection is easily disposed of. JOHN STUART MILL has shown clearly that it does not hold. A man rents 50 acres of land. Forty acres of this land are fertile; the quality of the remaining 10 acres is so poor that nobody would have thought of leasing them by themselves. The tenant allowed them to be included in his holding; but while he appears to be paying rent for the whole 50 acres, he is really paying for a part of them only, that is to say, for the 40 acres of fertile land.

Besides, the objection is far-fetched. Land is sometimes sold at 14s. per acre and less. Such a price would hardly represent a rent of 8d. per acre, a sum so small that it may be disregarded.

A third objection. It has been said that if RICARDO'S theory were true, rents would have kept on constantly increasing. Statistics show, however, that they have frequently fallen, and in recent years the fall has been very considerable.

But RICARDO'S theory contains nothing in the nature of a forecast of the movement of rents. It tells us under what circumstances rents will rise. It tells us that they will

¹ Similar observations are made by Dr. E. NAZZANI, *Sulla rendita fondiaria* (Forli, 1872), p. 82. See also E. BEHRENS, *Versuch einer kritischen Dogmengeschichte der Grundrente* (Leipsic, 1868), pp. 303-308.

rise whenever it becomes necessary to cultivate less fertile or less favourably situated land in order to be able to meet the existing demand for agricultural produce. Nowhere does RICARDO assure us, as he is often alleged to have done, that these circumstances will keep constantly arising. He has even indicated causes which must lead to a fall in rents, and of these causes we shall have something to say later on. Far from disproving his theory, the events of recent times have confirmed it. Owing to railway construction and other causes, many land areas have acquired a much more favourable situation. As a result, it has become profitable to grow corn in places where formerly it would not have paid to do so; corn prices have had to fall and rents to be reduced. Precisely those things have happened which RICARDO's theory would lead us to expect. For, improvement of the situation of land operates in the same way as the increase of its productive powers. Suppose that the land No. 3 mentioned in RICARDO's example as yielding 90 measures of wheat to the acre (and owing to the necessity for cultivating which, lands Nos. 1 and 2 began to yield rents of 10 and 5 measures respectively) unexpectedly yields 100 measures to the acre. Will this have no effect upon other rents? The effect will probably be so marked that a considerable fall will take place in the rent of land No. 1, and that land No. 2 will cease yielding rent altogether.

The objection which we have just been answering has been raised in another form, and in this form it involves an additional error. If RICARDO's statement were correct, say the objectors, the price of agricultural produce would have constantly risen, since the population has been constantly increasing, and has more than doubled in the nineteenth century. In spite of this, there has been no increase in the prices of agricultural produce beyond what could be accounted for by the depreciation of money; and even the depreciation of money has failed to bring about increased prices since the seventeenth century. According to the corn returns compiled in England¹ the average price of a quarter of wheat in each of the undermentioned periods and years was as follows:—

¹ See the *Corn Trade Year Book*, London, 1894.

Periods and Years.	Average Price of a Quarter of Wheat.
	<i>s. d.</i>
1650-1699	44 2
1700-1749	35 10
1750-1799	45 5
1800-1849	69 9
1850-1879	52 1
1880-1884	42 5
1885-1890	31 7
1891	37 0
1892	30 4
1893	26 4
1894	22 10

From the above it appears that in 1894 the average price of a quarter of wheat was about half of what it was in the period 1650-1699!

But anybody who would regard these figures as evidence against the soundness of RICARDO'S theory would be losing sight not only of what has just been pointed out, but also of the fact that a rise in rents is perfectly compatible with a fall in prices of agricultural produce. Whenever larger crops are obtained, owing to increase in the yield per acre, and cost of transport is at the same time considerably reduced, the farmer is in a position to pay more rent than he did before, even though no rise should have taken place in prices—even though they should have fallen, in fact; all will depend upon the extent to which these various causes have been operating. One of them has operated very effectually in past centuries. We shall presently give an instance of the great increase which has taken place in Western Europe in the number of quarters of corn obtained from an acre of land; and this will explain why rents are now considerably higher than they were in the seventeenth century, though they are not so high as they were some years ago.

A fourth objection to RICARDO'S theory still remains to be mentioned. It is the only objection which may be said to be reasonable, even though it be devoid of practical significance. It proves that RICARDO'S explanation of rent does not apply to a set of circumstances which it is possible for us to conceive in the abstract, but only in the abstract.

“If all lands were equally fertile and occupied equally

favourable situations," says Dr. MENGER,¹ "then, according to RICARDO's theory, no land could yield any rent, since the inequalities of which he speaks would not then exist." And again, "RICARDO's theory would make it impossible for the worst quality of land which existed in a country to yield any rent whatever, even supposing that after this most inferior soil had been brought into cultivation the necessity should be felt for a still further extension of the cultivated area." In MENGER's opinion, the causes which regulate rent are to be sought among the causes which regulate the value of instruments of production in general. An instrument of production acquires value in proportion as it becomes more necessary for the attainment of the object to which it has to be applied, and in proportion as the importance attached to that object itself becomes greater. By following out this line of thought, we must, in MENGER's opinion, arrive at a true theory of rent.

MENGER's observations are not to be disputed. If all lands were equally fertile and equally well situated, or if the very worst kind of land that existed could yield a return that would suffice for the support of those who tilled it, then, indeed, problems would present themselves from time to time for which RICARDO's theory could furnish no solution. But all lands are *not* equally productive or equally well situated, and in every country we find land that would be incapable of yielding enough produce for even the bare support of those who might cultivate it. We are quite ready to admit that RICARDO's explanation of rent takes no account of certain hypothetical cases; but if we look at things as they actually are, we find it quite sufficient. There is not the slightest danger of our falling into error as to the causes which determine the magnitude of rent, provided we regard rent as due entirely to difference in the productive powers of land.

¹ *Grundsätze*, p. 146.

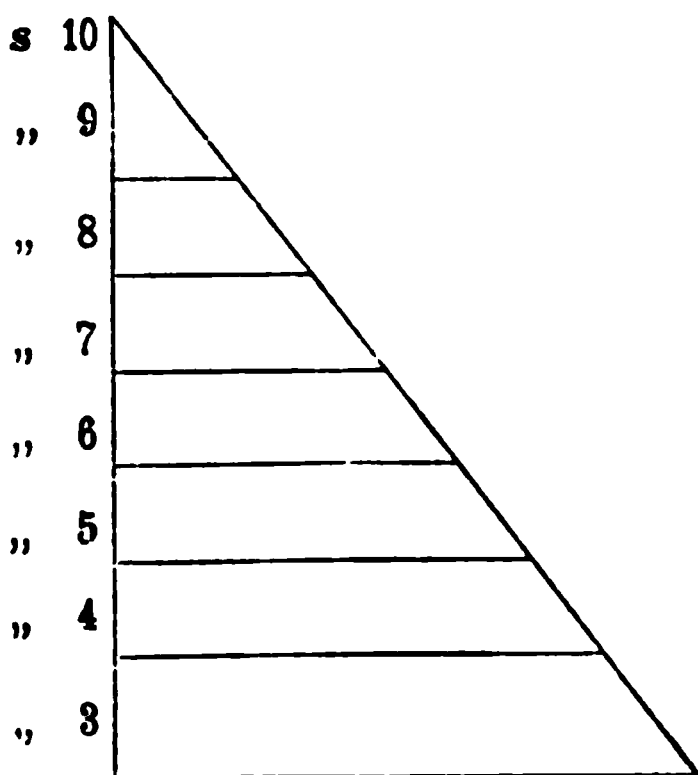
§ 4

Agricultural Rent and the Prices of Agricultural Produce

In order to obtain a still better grasp of our subject we will now trace the connection between agricultural rents and the prices of agricultural produce. Would a fall in these prices take place supposing that no rent had to be paid? RICARDO has expressed himself very decisively on this point. "Corn is not high because a rent is paid, but a rent is paid because corn is high; and it has been justly observed that no reduction would take place in the price of corn though all the landlords should forego the whole of their rent." Is this true? It has been contradicted more than once.

Our inquiry is useful not only because it bears upon an important point, but also because questions will frequently arise as to the way in which certain events will affect the prices of goods, and we must hasten to acquaint ourselves with a method to be applied when we are trying to solve such questions. It is not always easy to apply this method, but there is never any uncertainty as to how we should proceed when we do apply it.

The reader will remember the conclusion arrived at in the last chapter, namely, that in respect to most things the quantity that can be sold depends entirely upon the price asked; that less will be sold if the price be high than if the price be low. This truth may be presented graphically by the accompanying diagram. The vertical line represents a schedule of prices (per piece or per pound). The horizontal lines to the right of each of the sums represent the quantities that can be sold at each price. At the price of 3s. the saleable quantity will be large; at 4s. it will be somewhat less; at



9s. it will be very small, while at 10s. there will be no sale whatever. What the *actual* price will be, depends upon the quantity offered for sale. If the quantity offered be that standing against the figure 6, the price which the vendors will succeed in getting will be 6s. If a smaller quantity be offered for sale, the price will be 7s. or perhaps 8s. or 9s.

This condition of things may change. It is quite conceivable that a quantity which fetches only 3s. per pound or per piece to-day will sell at 4s. or 5s. per pound or per piece later on. We need not concern ourselves just now with the various causes by which such a change may be brought about, as an opportunity for doing so will present itself later. At present we have only to note that such a change is possible. It now appears that only two causes are conceivable by which a rise or a fall in the price of an article can be brought about—provided always that the article belong to the class of commodities to which the whole of our present argument applies, that is to say, commodities in common use. These two causes are as follows:—

- I. Changes in the schedule of prices, by which we mean that at the same price the saleable quantity may become larger or smaller.
- II. Changes in the quantities offered for sale.

Whenever any event produces one or other of the above results, it will have an influence upon the actual price. But no such influence can be expected if the event is certain not to alter either the schedule of prices or the quantity placed upon the market. For, as already stated, these are the only two causes by which a rise or a fall in the price of an article can be brought about. In spite of any understanding that may have been arrived at amongst the sellers of an article, provided they do their best to sell as much of it as they did before, the price of that article cannot rise unless the schedule of prices has changed in favour of the sellers.

This proposition is really an axiom, but for that very reason it may be used as a starting-point in any inquiry regarding the prices of commodities; that is to say, in any inquiry as to the prices of commodities of which equal quantities are unequally valued by different people, or for which

purchasers are usually found amongst persons of different grades of wealth.

The method which we have to follow in order to judge whether a particular event will bring about a change in the price of an article may now be easily stated. Does the event produce any effect upon the schedule of prices? If not, does it affect the quantity offered for sale? These are the questions which we must ask ourselves. If we are unable, in a particular case, to find an answer to either of them, we must give up the attempt to throw any light upon the future course of prices, in so far as there may be any connection between that course of prices and the event under consideration. In many cases, however, no doubt exists as to the answer, and in the case with which we are now dealing there is no doubt whatever.

It is assumed that the landowners decide to forego their rents altogether, and it is asked whether the prices of agricultural produce will fall in consequence.

In accordance with the method just indicated, we begin by inquiring whether any change will take place in the schedule of prices, and, if so, whether the change will be adverse to the sellers of agricultural produce. Will it no longer be possible to sell the same quantities of corn for the same prices which they have hitherto fetched?

There is not the least reason to believe that this will be the case. In fact, there is reason to expect that the very reverse will happen. For, when the tenants have no longer to pay any rent, they enjoy larger incomes, and can therefore purchase more than formerly. And as the farmers are a more numerous body than the landowners, this cannot have an adverse effect upon the volume of sales. It is certain, therefore, that the cause which we are considering cannot alter the schedule of prices in a way that will affect the interests of the sellers adversely.

Now for the second question. Will an increase take place in the quantity offered for sale? In other words, will more be produced? Here, again, the answer must be in the negative, and for the following reason.

The fact that the landowners have ceased to demand rent will not bring advantage to all, still less will it bring an

equal advantage to all. It will result in considerable gain to those who are cultivating very fertile and very favourably situated lands. The gain will not be so great for those whose holdings are not so good; and so on, until, in the case of those whose holdings consist of the most inferior kind of land, there will be no gain whatever. The disappearance of rent would therefore have no effect on the cultivation of such land as, owing to its inferior quality or unfavourable situation, had been the last to be brought into cultivation. But it is precisely upon such land as this, or upon land of still poorer quality, that production would have to be increased if it were to be increased at all. As, however, no change has taken place in the conditions under which a normal profit may be expected from the cultivation of this kind of land—there having been neither a rise in prices nor a fall in the wages of labour—there is no reason whatever for expecting that there will be any extension of the area under cultivation.

Let us suppose for a moment that prices really did fall after rents had been abolished. There would then no longer be any advantage in cultivating the most inferior and most unfavourably situated areas. These would be abandoned; less agricultural produce would be brought to market, and prices would recover, or they might even rise beyond their former level.

The conclusion to which our inquiry has led us is quite in accord with RICARDO'S dictum. The only result of rent, as MILL has justly observed,¹ is to equalise the profits of agricultural enterprise by enabling landowners to reap all special advantages resulting from the excellence of one kind of land over another. It would be a good thing for the tenant-farmers if the landowners were to forego these advantages, but it would be no gain to the consumers. For, in order to obtain the quantities which are now offered in the market, they have to pay such a price as compensates for the exertion of producing under the least favourable circumstances. And no improvement would be made in these circumstances by the abolition of rent, since no rent, or at any rate none to speak of, is being paid for the poorest and worst situated land.

The truth of this theory, as indeed of everything written

¹ *Principles*, Book III. chap. v. § 2, p. 287 (People's edition).

by RICARDO, has been disputed. It has been said to be too sweeping, to take no account of the adaptability of the soil to the cultivation of different kinds of crops. For example, a given piece of land is of such a nature that it would pay to grow oats upon it, were it not that rent has to be paid. Having to pay rent, however, the cultivator is obliged to grow some other kind of crop, with the result that the market is less abundantly supplied with oats than it would be if no rent had to be paid. Will not this, it is asked, influence the price of oats? RICARDO's proposition, say the objectors, is true of the yield of the land as a whole, expressed in terms of money. This yield governs rent, and is by no means the result of rent. But RICARDO's theory is not true as regards the prices of definite kinds of produce, and therefore requires some limitation.

The best way of showing the fallacy of this reasoning is to employ figures in order to illustrate the argument which it involves. A piece of land is capable of yielding £200 if it be sown with oats, and £250 if it be sown with wheat. The rent is £50, and the farmer's other disbursements amount to £180. It is clear that under these circumstances the farmer will not grow oats, as he would lose £30 by doing so. But it is equally clear that oats would not be grown upon the land even if *no* rent had to be paid, for even then the farmer would decide in favour of wheat,—not because he was afraid of losing money if he grew oats (he would even gain £20 by doing so), but because his profit would be larger (namely £70) if he grew wheat. Every farmer prefers growing a crop that will yield him £250 to growing one that will yield him only £200, if the cost of production be the same in each case. It is wrong, therefore, to contend that in this case the quantity of oats brought to market is less than it would be if there were no rent to pay, and RICARDO's proposition requires no limitation whatever.

What has been said has a more general bearing; it applies not only to rent, but to all income. The theory which says that prices are determined by cost of production, and which reckons rent, wages, and interest as part of that cost, is very generally believed in, and people seem to find great difficulty in discarding it. We fre-

quently hear of an enterprise not being engaged in or of a property not being acquired because of the heavy expenses that would be entailed, the large sums that would have to be paid in the shape of rent, wages, and interest. It seems quite natural to conclude from this that if the said expenses, or a part of them, could be obviated, production would sometimes take a totally different direction. Up to a certain point the conclusion is sound. Owing to what the farmer calls his "cost of production," he is now compelled to exercise his reckoning powers. If he grows oats where he ought to grow wheat, he has to pay dearly for his mistake; for he not only misses his chance of making a profit, but he suffers a direct loss. If land, labour, and capital were to be had for nothing, their use would frequently be determined by caprice. People would not always consider what was most needed, which of the wants of the community were most urgent; but what was most agreeable to themselves as individuals. Waste of force and of instruments of production, ill-advised undertakings, by no means uncommon as things are, would then be much more frequent, as there would be nothing to check them. When the standard rate of wages for workmen is £1 per week, we gather from that fact that a workman is capable of producing commodities to the value of at least £1 per week, otherwise wages would be lower. But this being so, it can never be compatible with the pecuniary interests of the *entrepreneur* to allow the workman to be employed on work which only yields a value of 15s. per week, and it would certainly not be to the advantage of the community that he should allow it. Even if the workman were to forego his wages, the *entrepreneur* would still seek to employ his instruments of production to the greatest advantage; but he would not exercise the same care in his choice, inasmuch as the consequences of a wrong selection would not be so serious. Those who employ labour to minister to their personal requirements, would be able to indulge every passing humour, whereas under the existing state of things they find it difficult, if not impossible, to do so. This is a rough sketch—to be completed as occasion may arise—of the important rôle which rent, wages, and interest play in the sphere of production. They exercise an influence upon prices only in so far as they supply

a strong incentive for making the inquiry which no prudent *entrepreneur* fails to make ; the inquiry which aims at discovering what objects people most need at a given moment ; as these are the objects for which they will be prepared to pay the highest prices in proportion to the exertion involved in their production.

We shall have occasion more than once to revert to what has just been said. It is essential for the proper understanding of important economic truths that we should clearly recognise both the correctness of RICARDO'S proposition as to the connection between rents and prices, and the general bearing of what that proposition contains.

§ 5

Agricultural Rent and Taxation

In all civilised countries taxes are levied both upon tenant-farmers and landowners. These taxes are of two kinds. Some are levied upon the user or owner of the land in his capacity of user or owner, while others are levied upon him in his capacity of inhabitant of the country, province, or parish. Although the subject of the *incidence* of taxation will be dealt with fully in the last part of the present work, it is necessary that we should say something about it here as well. We have to see whether, and if so in what sense and to what extent, certain taxes influence rents. We shall consider the effects in their turn of the local rates levied in England, of exceptionally high local taxation in general, irrespective of the basis of assessment, and lastly of the taxation of land.

We will begin with the local rates levied in England, as these are of a very peculiar kind. In England, as everybody knows, no income-taxes are levied by the local authorities, every one paying according to the rent of the real estate—no matter what kind—of which he has the use. The rates payable by the individual do not depend upon his means, since it is possible to possess comparatively small means and yet have the use of a comparatively large area of land. It is clear, therefore, that the rates, in so far as they are based upon

the rent of the land and not merely upon that of the dwelling, must be regarded as a special burden imposed upon agriculture for local purposes. Any one wanting to rent land in England finds that he has to deal with two persons, the landowner and the rate-collector. Each of these demands his share of the price to be paid for the use of the land, and as this price cannot, in the long-run, exceed the rent which the land is worth, it is clear that the two shares will together constitute the rent paid. In other words, the rent offered to the landowner will be curtailed by the amount demanded by the rate-collector. If, for example, the rate-collector has to be paid £10, and if the rent of the land, supposing that no rates had to be paid, were to be £100, then the landowner would not get more than £90, and it is out of his pocket, and not out of the pocket of the tenant-farmer, that the rates have in the end to be paid.

We can imagine rates going up to such a figure that the tenant-farmer finds it impossible to pay any rent at all, and this has, in fact, been the case in many parishes in England. In the well-known Report¹ issued in 1834 by the Royal Commission appointed to revise the English Poor Law—a report which led to a great improvement in that law—we find it stated that in the village of Gransden no tenant could be found for land yielding 30 bushels of wheat to the acre, although the rent asked did not exceed 5s. per acre. In the neighbourhood of Aylesbury no less than forty-two farms were to let, and in Cholesbury all the land with the exception of sixteen acres had been abandoned.

It may be asked how these facts are to be reconciled with RICARDO'S theory, according to which the rent depends upon the difference between the income yielded by the least productive and worst situated land under cultivation and that yielded by the better or more favourably situated land; seeing that this difference is not affected by the operation of the rates. The answer is simple. In the cases referred to the *full competitive rent* of the land had not decreased, but the Exchequer had appropriated a considerable portion of it, so that little or nothing was left for the landowner, and,

¹ Report of Her Majesty's Commissioners for inquiring into the Administration and Practical Operation of the Poor Law (London, 1834), pp. 65-67.

as a result, the *actual rent paid* for the land fell to a very low figure, and in some cases nothing remained for the owner. This affords another proof of the necessity for distinguishing between the full competitive rent and the rent actually paid.

The distinction is important in this case for another reason. The idea has often been discussed in England of dividing the burden of the rates—now no longer so heavy as they were formerly¹—between landowners and tenant-farmers, so that each should pay, say, half. Some have objected to this on the ground that, in the long-run, the farmer would gain nothing by it; his rent would be increased by exactly the amount to which he had been relieved in respect of rates. But this contention implies more than it would be possible to prove. Were all landowners to adopt a strictly commercial attitude, every reduction in the amount of rates payable by the farmer would no doubt lead to a corresponding increase in the amount of rent receivable by the landowner. But landowners do *not*, as a rule, adopt a strictly commercial attitude, so that the conclusion is somewhat rash. It is quite possible that the farmers might get some advantage from such a change. How far they ought to lay claim to that advantage is another question.

And now as to the operation of exceptionally high local taxation generally, irrespective of its basis of assessment. We have plenty of instances of rural parishes in Holland where exceptionally high local income taxes have to be paid, and complaints often arise on the ground that the absentee owners of land in such parishes bear no share in these taxes. The time has not come yet for discussing finance, and we do not mean to broach the subject here; we may, however, observe without digressing, that it is a mistake to suppose absentee owners of land in heavily taxed parishes to be quite exempt from the burdens entailed by such taxes. These taxes exercise an unmistakable influence upon the rents obtainable by the land-

¹ According to an official return made in 1893, local rates to the amount of £27,800,000 were paid in England in 1891. Of this sum only £4,260,000 or 15·31 per cent. was paid on land; £23,560,000 or 84·69 per cent. being paid on "houses and other properties." The rate amounted, on an average, to 3s. 8d. in the £, or 18½ per cent. of the rateable value.

owners. Whenever there is a great difference between the percentages of local income-tax paid in villages situated at no great distance from each other, it will be seen to exercise an effect upon the demand for farms, and consequently upon the rents paid for farms in those villages. The tenant-farmers will not be so heavily burdened as they appear or imagine, and landowners, while nominally exempt, will nevertheless be paying their share of the local tax in the same indirect way as the landowners in England bear their share of the local rates.

We shall have to go more fully into the question of the taxation of land. Does the taxation of land exercise any influence upon the rent of land? Conflicting opinions were expressed upon this question in the Dutch Lower House during the debates on the law of 1879 relating to the re-valuation of agricultural rents for the assessment of the land-tax. Some held that any change in the basis upon which the land-tax was levied must produce a change in rents. Others refused to admit that rents were in any way affected by taxes upon the land. Let us see how the matter really stands. The subject has an important bearing upon a question with which it is closely connected, viz., whether taxes upon the land may be regarded as taxes upon all that the land produces. LASSALLE, the German Social-Democrat, in a speech which he made in 1862, expressed the opinion that this was the case. In recounting the taxes which, though not absolutely "invented" by the middle classes, had, nevertheless, been "developed by those classes into an intolerable system" in order that the burdens entailed by the expenses of the State might be borne by the workers, LASSALLE did not hesitate to include the land-tax amongst them. "Though paid by the landowners, it has the effect of raising corn prices, and therefore the tax is ultimately borne by the consumers of corn."¹ PRINCE BISMARCK, as Imperial Chancellor, in 1881, expressed an opinion which practically coincided with that of LASSALLE. He held it to be necessary to impose a duty on foreign corn in order that it might be made to pay a tax equal to that imposed upon home-

¹ *Arbeiterprogramm*, p. 26.

grown corn through the medium of the land-tax.¹ It will thus be seen that the question has an important practical bearing.

This much is certain: if it be not true that the taxation of land affects rents, then neither is it true that it affects the price of corn. LASSALLE and BISMARCK must have reasoned thus:—

I. The burden of the land-tax is shifted by the landowner to the tenant-farmer.

II. It is shifted by the tenant-farmer to the consumer.

If the first proposition be not true, neither is the second. If the tenant-farmer has no burden shifted to him, then he has none to shift to another.

We will assume in our inquiry that the land-tax is paid by the landowner, and not (as is sometimes the case in the south-western part of Holland and in certain parts of Italy)² by the farmer. We will also assume that it is proportional to the rent, and does not, therefore, consist of a fixed sum per acre, regardless of the quality and position of the land. The question is, whether *such* a land-tax affects the rent of the land.

It may confidently be asserted that it does not.

Let us imagine three pieces of land, none of them as yet taxed. They are equal in area but unequal in fertility, so that the first of them, A, yields a harvest worth £400, the second, B, a harvest worth £250, and the third, C, a harvest worth £100. Taking the annual profit and all expenses of the tenant-farmer to be in each case £100, the following condition of things results:—

	A	B	C
Value of produce	£400	£250	£100
Profits, etc., of tenant-farmers	100	100	100
	<hr/>	<hr/>	<hr/>
Rent	£300	£150	nil

A land-tax amounting to 10 per cent. of the rent is now introduced, so that land A has to pay £30 and land B £15. The proprietors try to shift the burden of this tax on to the

¹ Speech of 4th February 1881, printed in the *Bulletin de Statistique et de Législation comparée* (1881), vol. i. pp. 148-153.

² SONNINO, *I Contadini in Sicilia*, pp. 281-286.

tenants, so that £330 instead of £300 is asked for land A, and £165 instead of £150 for land B. But will the tenants accede to this demand? If they do, the result will be, that the cultivator gets for his pains :—

$$\begin{array}{rcl} \text{In the case of land A,} & £400 - £330 = & £70 \\ \text{" " " B,} & £250 - £165 = & £85 \end{array}$$

while the man who was cultivating land C continues to draw his £100. In other words, the tenant-farmers would be paying the landowners more than the use of the land was worth; they would be conferring advantages which they were not enjoying themselves, and they would be doing this in unequal degrees: the labour expended on the best land yielding the worst returns! This is inconceivable. Through want of knowledge or other causes, a tenant may, for a time, pay a rent which exceeds the sum of the advantages which he derives from the use of the land, but nothing will induce him to do so permanently.

Those who, like LASSALLE, regard a land-tax as a kind of indirect duty on agricultural produce, do not rightly understand its nature. It would be this, if it consisted of a fixed charge per acre and were, therefore, to be levied on land which yielded no rent. But, seeing that it affects (however disproportionately at times) only the profits which accrue to the landowner, it can have no other direct result than to diminish those profits. It does not in the least concern the tenant-farmer how much the landlord may have to pay in the shape of national, provincial, or parish taxes out of the rent which he draws from the land. Be the sum large or small, it has no effect on the relative fertility and position of the land, and it is by these, and these alone, that rent of land is determined.

But, it has been urged, granted that the taxing of the land makes no difference in the *full competitive rent*, it may still influence the *actual rent* of the land. The full competitive rent of land A, in the example which we have just given, was £300; but there is nothing to prevent our assuming that the rent actually paid was only £270. Now comes the tax. The landowner, finding his income reduced by it, raises the rent to £300, that is to say, he brings it up to a

level with the full competitive rent, and thus succeeds in making the tenant bear the burden of the tax.

But what does this prove? A person who lets his land for less than it is worth, may or may not, according as he thinks fit, repeat this act of benevolence when the lease expires. Various causes, such as increased expenses entailed by a larger staff of servants, losses on the Stock Exchange, or the necessity for travelling abroad to recruit his health, may prompt a landowner to be less generous. The imposition of new, and the raising of existing land-taxes occupy a place among these causes, but that place is neither different from, nor more important than, that occupied by any of the other causes. Just as the land-tax may cause the rents actually asked to be increased, so may the employment of more servants or indulgence in greater luxury by the landlord cause them to be raised. We seek in vain for any reason why the psychological effect of the first of these causes should be more potent than that of the last. If we reflect a little we shall see that the increasing of the land-tax must be regarded in precisely the same light as the increasing of the private expenditure of the landlord. Neither generically, nor in any other respect, does the former differ from the latter in its results as bearing upon the matter which we are now considering. In no case can an increase in the rent of the land have any effect upon the price of the produce of the land. If the sum which the tenant has to pay for the use of the land be increased until it amounts to the full competitive rent, the tenant has simply to forego a profit which he has been accustomed to enjoy. This makes no change either in the "schedule of prices," or in the quantities of the produce offered in the market, and we have seen that at least one of these two must change before prices can rise.

Still, this very fact shows the existence of some connection, however slight and remote, between the taxation of land and the prices of agricultural produce. One of the foremost causes of increase in the quantity of agricultural produce placed on the market is the application of capital to the improvement of the soil, and the land-tax may be so regulated, or increased to such an extent, as to check the application of capital to that purpose. Suppose that the rate of interest is 5 per cent. per

annum, and that, by spending £1,000 on improving your land, you would probably be able to obtain £75 per annum more rent from it. It will now be to your advantage to incur this expenditure, since by doing so you will increase your income by £75 less £50, viz. by £25 per annum. Suppose, however, that the State has imposed a land-tax of one-third of the rent, and with every increase in the rent which the land yields—no matter what the cause of such increase—you are at once subjected to a proportionately increased land-tax. It is now no longer to your advantage to improve your land, since one-third of £75 is exactly £25, the sum by which you thought to increase your annual income.

This disadvantage attaches to every land-tax which does not consist in the payment of a *fixed* sum, and which increases with the rent of the land. It need scarcely be observed, however, that the disadvantage would be only slightly felt, if the proportion which the land-tax bore to the rent were low (say 6 per cent.), and if, at the same time, the valuations of the taxable produce of the land did not take place every year, but only once in ten or twenty years. The impeding action of the land-tax upon land improvements would then be scarcely discernible, since—to make use once more of the illustration given above—from the additional £75 per annum which the land was expected to yield after £1,000 had been spent on improving it, there would no longer have to be deducted one-third, or £25, but only 6 per cent., or £4 10s.; the incentive to improve the land would not be destroyed, or even greatly weakened. The owner would have to content himself with 7·05 per cent. instead of 7·5 per cent., no great lessening of his gain, at any rate not such a lessening as to destroy the incentive which he had to improve his land. Besides, the increased tax would not come into operation at once, but only after a certain period of time had elapsed.

We shall return to this subject in that part of our work which treats of production, where we shall have occasion to speak of the scheme advocated by HENRY GEORGE, the author of *Progress and Poverty*, which contemplates the raising of the tax on land up to a figure amounting to the full competitive rent, so that the revenues which the land now brings to its private owners may be used

for increasing the wealth of the whole community. What has been said above will enable the reader to see the disadvantages that would follow from the adoption of such a scheme, quite apart from the injustice that would be done to a class of citizens whose rights of ownership are no less deserving of consideration than those of any other class. In order to understand how dangerous the entire abolition of rent by legislative enactment would be, we must consider the importance of rent in relation to production. This importance is very great, and is often overlooked. If we regard rent solely with an eye to its relation to distribution of income, we regard one side of it only, and not its most favourable side. This does not present itself to our view until we have realised how powerfully the existence of rent operates as an incentive to the exercise of forethought in the use of the land. We then begin to see what sort of an estimate we should form, from a purely economic standpoint, of such schemes as those of HENRY GEORGE.

Landlords are sometimes represented as a class who contribute nothing towards the income of the community. It is wrong to represent them in this light. It may be said of the landlords that one of the most important of the instruments of production has been entrusted to their care. It is their duty to see that this instrument shall suffer no deterioration through improper cultivation; rather, that it shall acquire increased value, so that it may be handed down in an unimpaired and, if possible, in an improved condition to the next generation. The landlord does not in every case adequately fulfil these duties; but it cannot possibly promote the public welfare to deprive him of the incentive to do so.

§ 6

Improved Methods of Cultivation. Reduction of Cost of Transport. Increase of Population

We now propose to examine in turn three causes which affect the rent of land, and to discover the effect of each. First, we will consider improved methods of cultivation.

This cause does not always operate in the same way. We must distinguish between improvements applied over a small area, and improvements applied over a very large area. Whenever an individual landowner, who cultivates his own land or employs an agent to cultivate it for him, obtains more produce by improved working of the land, his income becomes larger. If his example be followed by many of his neighbours, if the improved methods be ultimately adopted by every one of these neighbours, the rents yielded by the land in that district will, after a certain lapse of time, become higher. The market for agricultural produce is so wide, and the quantities of such produce placed on the market are so numerous, that we may suppose a pretty large area for the district in which the improved methods are adopted, without being compelled to reckon upon any noticeable fall in prices. If, for instance, great progress were to be made in agriculture in Holland, the rent of land in Holland would be affected thereby in a manner almost wholly favourable. No doubt Dutch agricultural produce would appear in the market in greater abundance, but this would not cause any perceptible fall in the prices of such produce. There would, it is true, be less need than before for imported produce; but the falling off in the demand of a little country like Holland would have no effect upon the general demand in the world-market. The rent of the land depends upon the crops yielded, and upon the prices obtained for those crops. If crops increase while prices do not fall, the result is entirely a gain to the landowners, and it is they who will ultimately enjoy the advantage. The tenant-farmer will only enjoy it so long as he has not to pay a higher rent; for his profits are regulated by the causes which determine the general scale of profits, and, according to our hypothesis, there has been no change in these causes.

But when improved methods of cultivation are adopted over a very wide area, two causes are set in operation, one of them exercising a favourable, and the other an unfavourable, influence upon rents. The first of these causes is the increase of the crops; the second, the fall in prices resulting from this increase. STUART MILL, in his treatment of the question now before us, assumes it as possible that the crops will remain the

same, and that the result of the improved cultivation will be a diminution of the effort of production.¹ This assumption appears to us to be inadmissible. Whenever, through the application of equal quantities of labour and capital, greater quantities of produce are obtained than before, it will become advantageous to cultivate land which it could not previously have paid to cultivate; this of itself will lead to fresh production, and the self-interest of every person who enjoys the use of land will operate in the same direction. A tenant-farmer or a landowner, who cultivates his own land, will not allow a part of the labour or of the instruments of production at his disposal to remain unutilised, when he finds himself able to reap more abundant harvests without greater exertion, or equally abundant harvests with less exertion, than formerly; of the two courses of action which, in the abstract, are here open to him, he will choose the one which leads to his obtaining more abundant harvests. It might be objected, perhaps, that this could not safely be said of a people who were deficient in enterprise; but the objection would have little weight, as the adoption of anything like important improvements in cultivation by such a people is not to be expected at all. The incentive to improvement is simply the desire to obtain a larger amount of produce from the same area of land; to do away, for instance, with the necessity for allowing the land to lie fallow for a while at certain intervals. It is safe to say that improved cultivation has never yet been adopted without resulting in an increase of production.

Were it, nevertheless, possible to apply improved methods over a large area without increasing production, their effect on the rent would be the same as that of improvements applied within a small area. Here again we have occasion to differ from MILL, who, it would appear, on this point falls into the error to which a faulty statement of the connection between value and cost-price is so apt to lead.² In the case which he assumes, viz. decrease of the effort of production without increase in the amount of produce

¹ *Principles of Political Economy* (People's edition, London, 1865), Book IV. chap. iii. § 4, p. 434. [As to the expression, "effort of production," see footnote on page 347 *post.*—A. A. W.]

² Cf. conclusion of chap. i. § 4, p. 66.

yielded, he thinks that the prices of agricultural produce will fall.¹ This is even less admissible than the first of his statements. If there be no change in respect to the quantity placed on the market, and the demand remain the same, then no fall in prices need be expected. And that being so, there is equally little reason for expecting the fall in rents which he anticipates in such a case.

After this digression we feel entitled to repeat the proposition that improved methods of cultivation, when applied over a very large area, set two influences in operation. But which of these will preponderate? Suppose North America to have succeeded in greatly extending her cotton production, the labour involved in producing cotton having been reduced from 5 to 3. Cotton prices will now fall; but to what extent will they fall? All depends upon this. If they only fall in the proportion of from 5 to 4, there will be a rise in the rents of American cotton-growing lands; for, whereas formerly five days of labour were paid for with a sum represented by the figure 5, the figure 4 now represents the amount paid for three days' labour. Even if the fall in prices were to be in the proportion of from 5 to 3, the effect upon rents would in the end be favourable, and for the following reason. The increased production is probably obtained in part from the cultivation of lands on which it did not pay to grow cotton before, and upon which cotton-growing will cease to be profitable as soon as ever the gain derived from improved cultivation is counterbalanced by the fall in cotton prices. The least fertile of these lands will thus be abandoned, and this will, to some extent, check the supply of cotton, and cause the price to recover from the low figure to which it had originally dropped: after having dropped to 3 it will rise to $3\frac{1}{2}$, for example.

These figures are quite hypothetical. They merely serve the purpose of indicating the cause, upon the operation of which it depends whether rents will be raised or depressed, or whether they will remain unaffected by improved cultivation carried out over a very wide area: it depends upon the movement of prices. To be more precise, since a fall in prices is inevitable under the cir-

¹ *Principles*, p. 434.

circumstances, it depends upon the extent to which prices will be depressed by the increased supply of produce in the market. This again will depend on the area of the land upon which the improvement of cultivation is carried out, and on the demand for agricultural produce. This demand is always and everywhere increased by the fall of prices, but not always and everywhere in the same proportion.

It will be seen, then, that improved methods of cultivation when applied over a large area always tend in great measure to benefit the consumers; how far they will prove an advantage to the landowners is always more or less uncertain. If it were possible to depend entirely upon RICARDO, we might speak more positively, and even assert that they always operate greatly to the disadvantage of landowners. But in this RICARDO goes too far. In the first place, he assumes that agricultural improvements cause the yield of produce per acre to be increased in equal quantities for all classes of land; Professor MARSHALL has proved by a diagram,¹ that if proportionate increases be assumed, RICARDO'S argument has nothing to support it. In the second place, he appears to look upon the demand for agricultural produce as incapable of being increased by the fall of prices, so that, when the land produces more without requiring more labour, no other course remains but to reduce the area under cultivation, and to apply less capital in order to avoid overstocking the market; a theory amply refuted at the present day when wheat is even used for feeding cattle. But RICARDO falls into a third and a very much graver error. He rightly contends that the least fertile of the lands that are under cultivation can under no circumstances yield rent, but that they will always yield enough produce to compensate in full for the labour and capital laid out upon them. This contention is true, because there can be no question of combination among landowners with the object of preventing cultivation from being extended to the point at which it ceases to be profitable. If such combinations were possible, and if they actually took place, then the least fertile of the lands

¹ *Principles of Economics*, fourth edition (London, 1898), pp. 719-723. Cf. also E. C. K. GONNER'S edition of RICARDO, with notes (London, 1891), Appendix B.

under cultivation would really yield some rent. Now, what does RICARDO do? Without being aware of it, he assumes combination among landowners; he predicts something that will never happen under the free play of supply and demand. He then proceeds with his argument, as if supply and demand had been allowed free play.

Some figures may serve to make this clear. Suppose three classes of land of equal areas, A, B, and C. Class A produces 100, class B 80, and class C 60 equal quantities. Payment for capital and labour (profits of cultivator, his wages and other expenses) amount in each case to 60, so that the state of things is as follows:—

	A	B	C	Total.
Yield of land	100	80	60	240
Less, for capital and labour	60	60	60	180
Rent	40	20	0	60

By means of improved methods it has been found possible to make each kind of land produce an additional thirty quantities, but according to RICARDO this will not result in increased production, as cultivation will now be confined to—

A, which will in future yield 130 quantities.
B, " " 110 "

It is evident that this result can only be brought about by combination, since in the ordinary course of events a different result was to be expected. It was to be expected that production would increase, that prices would fall, that the quantities allotted to capital and labour would be somewhat larger, seeing that these quantities represented less value than before, and that, after fluctuating for a while, things would settle down at the point at which equilibrium would once more be restored.

There is another thing in RICARDO's proposition which is entirely arbitrary. According to him the state of things will in future be as follows:—

	A	B	Total.
Yield of land	130	110	240
Less, for capital and labour	110	110	
Rent	20	0	

Whence the increase from 60 to 110 in the number of quantities allotted to capital and labour, though production has remained the same, prices, therefore, have not dropped, and, moreover, all the farmers and labourers have been turned away from land C? RICARDO would not be able to give a satisfactory answer to this question, and so we are justified in adhering to our opinion that he has overestimated the adverse effects which the adoption of agricultural improvements upon an extensive scale may have upon rents. Its effects may be adverse, but they are not necessarily so, as he would have us understand.

It will be asked whether the mere possibility of these adverse effects does not deter many landowners from adopting improvements. There is no reason to fear that such is the case.

Agricultural improvements are usually confined to a small area at first; it is only by degrees that they become general. There is always a strong inducement, therefore, for the landowner to encourage them; for, so long as they are not applied so extensively as to cause prices to fall, they are likely to bring him clear gain. And even if prices should fall, the incentive to adopt improved methods of cultivation is not weakened, but rather strengthened; for it is only by obtaining larger crops that the individual landowner can compensate himself for the loss entailed upon him by the fall in prices. Let us, however, note in passing, how prominently the bright side of the so-called peasant-proprietor system is revealed to us here. The person who would benefit more than anybody else by a permanent increase of the yield of the land, is, under this system, also the person who is capable of exercising the greatest influence in the matter. It is unquestionably a bad feature of the tenant-farmer system that it divorces ownership from use. Although the landowner who has let his land is not absolutely deprived of the power of influencing the manner in which it shall be cultivated, nevertheless his influence upon production is not so strong as that of the peasant-proprietor.

We now come to another cause which exercises an influence upon rents, viz.:—reduction of transport charges. Here again we have a cause which is observed to operate in two

ways, since high transport charges operate in the same way as poverty of soil. No advantage can be got from cultivating the highest quality of land, if that land be situated at such a distance from the market, or if communication between it and the market be so expensive, that the greater part of the produce would be swallowed up in freight charges. If matters improve in respect to freight, the area under cultivation will increase, consequently more produce will be sent to market, thus prices will go down.

Here it appears in what manner the reduction of transport charges operates unfavourably upon rents, and since 1883 we have had an opportunity of realising the strength of this adverse influence, as the fall of corn prices, which began in that year, and which, in 1894, brought the average price of wheat down to less than half the figure at which it stood twelve years before, must be almost entirely attributed to the construction of railways in remote regions and the reduction of shipping freights. In order to convince ourselves of this we have only to see which are the great corn-exporting countries at the present time: they are Russia, the United States, British India, and, since quite recently, the Argentine Republic. From 1851 to 1855 Russia exported 18,345,000 bushels of wheat and 5,877,000 bushels of rye per annum; in 1890 to 1894 these figures had risen to 89,320,000 and 28,105,000 respectively. In 1850 the United States produced 99,000,000 bushels of wheat and 591,000,000 bushels of maize; in 1892 to 1894 they produced, on an average, 457,000,000 bushels of the former and 1,488,000,000 of the latter per annum. Wheat was not exported at all from British India in 1870; from 1889 to 1894 nearly 30,000,000 bushels of wheat were exported from that country. The wheat exports of the Argentine, which, in 1884, scarcely amounted to 2,750,000 bushels, had risen in 1893 to between 33,000,000 and 36,000,000 bushels.

In these same countries a very great expansion of the railway system took place at the same time, as shown by the following figures:—

Countries.	Number of Miles of Railway Line open to Traffic in the Year.		
	1850	1870	1892
Russia in Europe . . .	373	6,982	19,440
United States . . .	8,587	52,964	174,643
British India . . .	...	4,760	17,553
Argentine . . .	...	609	7,627 ¹

The fall of corn prices, in illustration of which some figures were given in the table on p. 91, has undoubtedly been caused chiefly by this expansion.

We must not, however, conclude from this, that improvement of the means of transport necessarily reduces the aggregate of the rents yielded by the land. Were we to draw such a conclusion we should be taking no account of the other operating cause of which we have spoken, and of which the result is, that probably the less favourably situated lands gradually yield more rent, while those lands which formerly yielded no rent whatever now begin to yield some. In order to make this clear, we will assume that the whole of the land in a country is of uniform fertility, and that the sum of money obtainable in the market for the crop produced by any acre of the land is expressed by the figure 100. All the land is not equally favourably situated; the expenses of the cultivator, including his usual profit, and also the transport charges on his produce, are therefore much less in some places than in others. This we express by the figures 60, 70, and so on. The condition of things will then be as follows:—

	A	B	C	D	E	F	G	H	I	K
Gross yield per acre	100	100	100	100	100	100	100	100	100	100
Expenses, etc. .	60	70	80	90	100	110	120	130	140	150
Rent . . .	40	30	20	10	0	Total, 100				

Production cannot now extend beyond land E; all the rest of the land must be left out of cultivation.

But, owing to the construction of railways and canals, the expenses of the cultivator, represented above by the figures 60, 70, 80, etc., are reduced and are now represented, as shown in the following table, by the figures 60, 63, 66, etc. An important change in the condition of things takes place in

¹ In 1891.

consequence. As a result of the increase of production which has now become possible, prices fall, let us say from 100 to 84. Some rents are affected adversely by this; nevertheless, in the aggregate, they rise somewhat.

	A	B	C	D	E	F	G	H	I	K
Gross yield per acre	84	84	84	84	84	84	84	84	84	84
Expenses, etc.	60	63	66	69	72	75	78	81	84	87
	—	—	—	—	—	—	—	—	—	
Rent	24	21	18	15	12	9	6	3	0	Total, 108

Lands A, B, and C have lost, but D has gained; while lands E, F, G, and H now yield some rent, whereas formerly they yielded none.

Our hypothesis—that the whole of the land is of uniform fertility—is contrary to the actual state of things; but the same conclusion would have been reached if we had assumed varying degrees of fertility, only then our illustration would have been less clear.

The great improvement which has taken place in means of transport is undoubtedly one of the most fortunate things that have occurred in the domain of economics in our time. Not only has it prevented a preponderating influence being acquired by what we shall presently mention as a cause of increase in the prices of agricultural produce—a cause which has been more potent in the nineteenth century than ever before—but it has also rendered great changes in those prices impossible, or at any rate very improbable. Formerly it might happen—in fact it was the case in British India as recently as 1878—that food was abundant in one district while the people in the next district were starving. This caused local increases of prices which are now no longer to be anticipated. According to ROGERS¹ the average price of wheat per quarter in the year 1287 was 2s. 10½d., whilst in the year 1316 it was 16s. ROSCHER² assures us that in 1361 30 groats had to be paid for the same quantity of corn as could formerly be purchased for 3 groats. The legislation of those days contained numerous enactments designed for the

¹ *Six Centuries of Work and Wages* (London, 1884), vol. i. p. 125.
² *National Oekonomik des Ackerbaues*, p. 413. Cf. also the statistics of prices in the *Annuaire de l'Economie Politique* of 1849, pp. 334-336, extending over the period from 1447 to 1846.

purpose of averting famine.¹ As a rule these enactments were not wise, but it must be admitted that Governments were then confronted by a difficulty unknown in the present day, viz.: how to safeguard the inhabitants of town and village against dearth of food.

The area of land capable of being put into cultivation in order to supply the world-market has been so greatly extended, owing to the great reduction of the cost of transport, that local crop failures have but little effect on prices. The aggregate yearly demand of all countries in the matter of wheat, for example, which is estimated at about 2,475,000,000 bushels, was met in 1894 by Russia to the extent of 286,000,000, by North and South America to the extent of 709,500,000, and by Asia, Africa, and Australia to the extent of 390,500,000 bushels. The most of this was used for home consumption, but a large part, as we have just seen, served for the purpose of export, and it is scarcely conceivable that the quantity usually available for export should, everywhere and at one and the same time, be diminished to any considerable extent by bad harvests. Russia, which, from July 1st, 1887, to June 30th, 1891, was able to export 110,000,000 bushels of wheat per annum on an average, could only export 50,600,000 in the year 1891-92. And yet, wheat, which was worth 31s. 9d. per quarter in London in 1890, did not exceed an average of 37s. in 1891, and fell in 1892 to 30s. 4d. per quarter. The reason was that the failure of the Russian harvest in 1891 was coincident with a very plentiful harvest in the United States, where nearly 688,000,000 bushels of wheat were produced as compared with 429,000,000 in the preceding year. In the succeeding years the United States' wheat crops were smaller; but at the same time the area under wheat cultivation was increased in the Argentine, where little short of 99,000,000 bushels must have been obtained in 1894. In fine, no civilised people is any longer dependent, in the matter of its food supply, upon its own land and that of its immediate neigh-

¹ Cf. Dr. P. J. BLOK, *Eene Hollandsche Stad in de Middeleeuwen*, p. 321, and *Eene Hollandsche Stad onder de Bourgondische-Oostenrijksche heerschappij*, pp. 345 and 400. Also TURGOT, *Oeuvres* (Ed. Guillaumin), vol. ii. pp. 215-218; but more especially ROSCHER's little work entitled *Theuerungspolitik*.

bours. A world-trade in corn has arisen, and the area covered by this trade is still steadily increasing.¹

The immense importance of this becomes still clearer to us when we consider the great growth of population in our day. The theory of population will be dealt with fully in the third part (Volume II.) of this work; we may, nevertheless, even at this stage, notice what a close relationship that subject bears to the theory of rent.

We have succeeded in showing that both improvement of cultivation and cheapening of transport operate in a twofold manner; increase of population, however, always and unconditionally tends to cause rent to rise. This is the important and serious truth which RICARDO has discovered, and which has not yet lost any of its significance, however it may seem to have done so under the influence of the events of recent times.

Many are of opinion that increase of population also operates in two ways. Man is a consumer, but he is also a producer; so that growth of population increases not only the demand, but also the supply, thus neutralising its own influence upon prices and upon rents. RICARDO enables us to see the weak side of this argument; for, from him we know that it is always to less fertile or less favourably situated land that recourse must be had, according as the amount of agricultural produce necessary to satisfy all requirements becomes greater. This growth in the demand for agricultural produce may proceed hand in hand with an increase in the amount of produce obtained per acre. Thus we learn from statistics of agriculture that the average yield per acre has increased in France in the following manner.

				Yield per Acre.	
				Period 1815-1835.	Period 1879-1888.
Wheat	.	.	.	12·9 bushels	16·7 bushels
Rye	.	.	.	11·7 "	15·5 "
Barley	.	.	.	15·0 "	20·3 "
Oats	.	.	.	17·8 "	26·5 ² "

¹ Some notion of this trade may be obtained from NEUMANN-SPALLART'S *Uebersichten der Weltwirthschaft*, continued by F. VON JURASCHEK, and from the *Corn Trade Year-Book*, published by the editor of the *Corn Trade News*.

² *Zeitschrift des Kön.-Preuss. stat. Bureaus*, 1878; vol. ii. p. xxiii. of *Stat. Correspondenz*; and JURASCHEK'S *Uebersichten der Weltwirthschaft*, p. 120.

The agricultural statistics of Holland point to a noticeable increase in the yield per acre in that country too, as the following figures will show:—

	Yield per Acre.	
	1876-1880.	1886-1890.
Wheat . . .	23·6 bushels	27·2 bushels
Rye . . .	19·4 „	21·9 „
Winter barley . .	40·2 „	45·1 „
Summer „ . .	30·2 „	33·8 „
Oats . . .	41·2 „	44·4 „
Potatoes . . .	124·7 „	163·7 „
Flax . . .	382 lbs.	436 lbs.
Beetroot . . .	9·29 tons	9·58 tons. ¹

Increase of population may also be accompanied by extraordinary improvement and expansion in the means of transport, such as the nineteenth century has witnessed. In such cases it is possible that, in spite of the greatly increased demand for agricultural produce, the prices of such produce may fall. Such a fall must not, however, be regarded as the indirect or remote effect of the increased population, but as having been brought about by causes independent of that increase. RICARDO'S law has been confirmed by what has been happening in recent times, seeing that it has been found necessary to keep on extending the area of cultivated land in order that there might be no deficiency of supply. Shortly before each fresh necessity for extended cultivation has become manifest, compliance with that necessity has been facilitated by inventions which no one could have anticipated; those inventions have been adopted upon an extensive scale, and the new wants have been amply supplied. We must not forget, however, that a great amount of capital had to be expended in order to enable them to be supplied. Were any one to endeavour to make an exact computation of the sum which mankind pays for the agricultural produce which it receives from the interior of Russia, America, and British India, he would have to take into consideration the sums spent in those countries on railways and canals, and the capital invested in the ships which convey the corn to our shores. The growth of population has made all this necessary; had the population not increased, this capital could have been

¹ *Jaarcijfers* (1893), p. 105.

applied to other purposes. Owing to technical progress, mankind has been enabled to surmount a great difficulty with which it was confronted. The upwards of 364,000,000 human beings now dwelling in Europe are better and more cheaply supplied with food than the 170,000,000 of which the population of our continent consisted at the beginning of the nineteenth century. It would be wrong, however, to conclude from this that growth of population provides its own remedy. The remedy has come; but it has come from elsewhere. The growth of the population has of itself brought about the very result which RICARDO pointed out.

§ 7

The Course of Rents

It is only quite recently that we have acquired some degree of acquaintance with the rents yielded by land in former centuries. We owe this acquaintance to the researches of G. D'AVENEL.¹ These, however, are confined to France and, though very interesting, are far from complete. In order to be able properly to appreciate statistics of rents, it is necessary to know what kind of land the figures relate to, and what burdens the tenant-farmer has to bear. It is especially difficult to ascertain these particulars when the figures relate to very remote times. Lack of transport facilities, again, must frequently have caused great inequality in the rents of lands possessing equal fertility, even between places which we should now consider as lying in close proximity to one another. Particulars furnished by contemporaries concerning the rents paid for good arable or pasture land under normal conditions would be of greater value than figures extracted from old records, but no such information regarding the Middle Ages is available. The earliest year for which we possess any data of this kind is 1699, and for these we are indebted to the well-known English

¹ *Histoire économique de la propriété, des salaires, des denrées, et de tous les prix en général depuis l'an 1200 jusqu'en l'an 1800.* Published in Paris in two parts in 1894.

writer CHARLES DAVENANT. He gives 5s. 6d. as the rent yielded in his time by an acre of good arable land, and 8s. 8d. per acre as the rent of pasture land.¹ These are trifling amounts compared with rents of the present day, but will not surprise those who are aware that at that time 11 to 15 bushels per acre was considered a good wheat crop.² Nowadays the yield per acre is 29 bushels.

Fuller particulars are available for the last forty or fifty years. Concerning Prussia, where the State owns large domains, we have the following figures, showing the rents obtained per acre of arable land in the eight old provinces:—

	s.	d.
1849	5	8
1869	12	7
1879	14	5
1890-91	15	9

If we take the first figure to represent 100, we find the following remarkable increase in rents to have taken place:—

1849	100
1869	224·3
1879	256·3
1890-91	280·2 ³

The taxable incomes from landed estates are repeatedly valued in France. A comparison of the valuations of 1851 with those of 1879 shows the following increases in the rents per acre for lands of different kinds:—

	Value of Taxable Income per Acre.			
	1851.		1879.	
	s.	d.	s.	d.
Best quality land . . .	38	8	53	9
Arable land	13	9	18	3
Pasture and meadow land .	23	6	31	3
Vineyards	22	5	42	0
Forest land	6	6	7	3
All kinds together . . .	12	3	17	1

¹ *Works*, Ed. 1771, Part II. p. 216.

² Cf. ROGERS, *A History of Agriculture and Prices in England*, Part V. p. 58.

³ VON DER GOLTZ, *Die agrarischen Aufgaben der Gegenwart* (Jena, 1894), pp. 38, 39.

The aggregate taxable income from land was £106,200,000 in 1879 as compared with £72,960,000 in 1851.¹

In Holland the first general valuation of agricultural rents for purposes of the land-tax took place about the year 1830. Under a law of April 25th, 1879, a re-valuation was ordered, the results of which, compared with those of the original valuation, were as follows:—

	Old Valuation. £	New Valuation. £
North Brabant . . .	517,515	882,440
Gelderland . . .	462,760	1,030,167
South Holland . . .	595,450	1,352,668
North Holland . . .	403,700	1,000,368
Zeeland . . .	320,095	575,113
Utrecht . . .	201,562	429,592
Friesland . . .	436,024	1,088,206
Overijssel . . .	212,473	450,028
Groningen . . .	362,916	701,628
Drenthe . . .	72,432	149,536
Limburg . . .	260,918	352,478
Total . . .	3,872,845	8,012,224

Although it is to be observed that the older valuations were in some places very defective, and that the area has been increased by reclamations of marsh land and by the cultivation of spaces previously unutilised, the above figures nevertheless point to the increase of rents. Their increase is equally apparent from the following data concerning rents actually paid for State domain lands in North Brabant:—²

Years.	Rents per Acre for			
	Arable Land.		Pasture and Meadow Land.	
	s.	d.	s.	d.
1835-39 . . .	17	11	18	5
1840-44 . . .	17	9	19	3
1845-49 . . .	30	0	24	0
1850-54 . . .	35	2	29	7
1855-59 . . .	45	3	31	0
1860-64 . . .	44	5	32	7

¹ *Bulletin de Statistique et de Législation Comparée* (1879), Part II. pp. 111 and 119; and 1883, Part I. pp. 583, 605; Part II. p. 43.

² *Bijdragen van het Statistisch Instituut* (Tweede jaargang), pp. 58 and 67.

Years.	Rents per Acre for			
	Arable Land.		Pasture and Meadow Land.	
	s.	d.	s.	d.
1865-69 . . .	42	4	35	3
1870-74 . . .	50	7	38	6
1875-79 . . .	54	5	42	3
1880-84 . . .	50	1	43	2

The following statement shows the average yearly rents per acre obtained by the city of Kampen (Kampereiland) from 1820 to 1875 :—¹

Years.	Average Rents per Acre.			
	s.	d.		
1820-24	18	0		
1825-29	17	10		
1830-34	17	2		
1835-39	17	0		
1840-44	20	10		
1845-49	22	2		
1850-54	26	11		
1855-59	31	5		
1860-64	49	7		
1865-69	51	7		
1870-75	59	9		

These statements and figures are incomplete and fragmentary, but they all point to the same tendency in rents. In spite of fluctuations, this tendency has, on the whole, been in an upward direction, and we need not be surprised that it has. The yield of the land has been increased; cost of transport has decreased; but, until quite recently, the combined influence of these two tendencies was not strong enough to bring about any noticeable reduction in prices, and this has been due to the growth of the population. Hence, landowners have derived unmixed benefit from the increased crops and cheaper transport rates.

It is not surprising that the proposition that the rent of land has a natural tendency to rise continuously should have found acceptance. There was a time when nobody could speak or write about the movement of rents without thinking of that gain—that “unearned increment,” as JOHN STUART

¹ The returns go no further than the year 1875, and do not specify the classes of land.

MILL calls it—which increase of population, progress in science, and improved transport facilities cause, as it were, to flow into the pockets of the landowners. If people ever think of this nowadays at all, they do so with a smile. Nobody then foresaw that, in the race between agricultural production and the demand for agricultural produce, the former would win, and that a period of falling corn prices and falling rents, like that through which we are now passing, would ever be reached. The landowners were represented as a class of society who had the rare good fortune of “growing rich in their sleep.” Nowadays, though they may devote the whole of their energies to the task, they have great difficulty in guarding their estates against serious depreciation, and in most cases their efforts to do so are unsuccessful.

There was exaggeration in the old way of representing the landowner's position; but it contained a grain of truth, which we, in the present time, are in danger of ignoring. Rents have really risen on the whole; their course has not always been in an upward direction, but, on the whole, it has been so. There have been periods of falling rents, but they have always been followed by periods during which a more than compensating rise has taken place, and fortunes which have remained invested in land for a number of centuries have not decreased, but have grown larger. Is it inconceivable that there should once again be a period of rising rents? Europe annually produces some 5,225,000,000, and imports from 165,000,000 to 192,000,000 bushels of corn of various kinds, so that its total consumption of corn amounts to nearly 5,500,000,000 bushels. With an average rate of increase of 1 per cent. in the population, it would not take more than forty years to increase this figure by about one-half, or by 2,750,000,000 bushels, and this very nearly represents the average annual yield of corn of every description in the United States for the period 1885-1889. Production in the United States and elsewhere is capable of being considerably increased. But there and elsewhere the population is growing even much more rapidly than in our own hemisphere, so that forty years hence it will not be in Europe alone that the demand for corn will have increased by one-half, if the population keeps on growing at the same rate. People were

wrong, formerly, in looking upon the then existing state of things as permanent, and not contemplating the possibility of even a temporary change. But it would be falling into a new error to regard the present state of things as unchangeable too. What is more natural than that, in the race between agricultural production and the demand for agricultural produce, each should alternately lead? At the present time production is in advance of demand. We have no guarantee that this will always be the case; and as land is limited, while population may still increase very much, it must even be considered probable that, at some time, demand will again be ahead of production. The opinions expressed about unearned increment have not lost all value. The time may come when they will be read once more with a growing interest, and when their practical significance will be deeply felt.

Should such a time come, then a question will be asked, which nowadays attracts no attention, a question which we shall state and answer by way of concluding the present chapter. Is there any limit to the extent to which it is possible for rents to rise? An acre of fertile and well-situated arable land now yields £4, let us say. Is it conceivable that, some day, the same acre may yield £12 or £120, or is this an impossibility? We are assuming, of course, that the value of money remains unchanged, otherwise the question would be futile; furthermore, our question does not relate to land possessing a monopoly value, such as land on which very choice qualities of wine or tobacco are produced, but to ordinary arable land. Is there any limit to the extent to which the rent of such land may rise, or is it possible for it to rise indefinitely?

There are, as we have seen, two causes which give rise to increase of rents, one being an increase in the prices of agricultural produce, and the other, an increase in the amount of produce yielded by the land, unaccompanied by a change, or at any rate by a proportionate fall, in the prices of such produce. Were the first of these causes the only one, then the increase of rents would find its limit in the purchasing power of consumers, and this purchasing power, though capable of being increased, is very limited with the majority of the

population. It can be proved by statistics that, when the price of bread is high, the amount of bread consumed is small. Thus high corn prices provide their own remedy. Were these high prices the sole cause of high rents, then rents could never rise very high; they could not even have risen to the figure at which we now find them.

Seeing, however, that rents may go up without there being any rise,—in fact, even though there be a fall,—in the prices of agricultural produce, a different conclusion has to be drawn. We find that the limit of their ascent is determined by the productive powers of the land, and, as nobody can say how great these powers may be, it is impossible to state any figure as representing the highest point to which the rent of well-situated land is capable of ascending so long as there is a fair demand for agricultural produce. Who can tell what improvements may not yet be possible as regards rotation of crops or the selection of seeds, or manures, or the working of the soil! Startling results have been achieved already. In Germany the yield of wheat does not exceed on an average eight or nine times the quantity sown. Nevertheless, it has already been found possible to make land yield fifty times the quantity of wheat with which it was sown, and a still higher rate of yield is regarded as possible.¹

Here we have the answer to our question. Land is an instrument of production. The value which that instrument of production is capable of acquiring is determined by its properties; that is, by the extent to which men succeed in discovering and utilising those properties. There is nothing absurd in the supposition that in a few centuries the land will yield three or five times the rent which it now yields. But if this supposition is to be realised, agriculture will have to achieve progress far beyond what it has hitherto achieved. The extent to which higher prices are by themselves capable of increasing rents is relatively slight. It is only by the second of the two causes which we have mentioned that a considerable rise in rents can be brought about. What the limits of that rise may be, it is impossible to say.

¹ See *Zeitschrift für die gesammte Staatswissenschaft*, vol. 50, p. 666.

CHAPTER III

THE RENT OF HOUSES

§ 1

House Rent and the Demand for House Room

IN this chapter we propose to treat of the rents of buildings, and more especially of the rents of dwelling-houses, as the greater number of buildings are used for providing house room. Of other kinds of house rents we shall only speak as occasion may arise. The causes which determine the rents of dwelling-houses coincide to a great extent with those which regulate the rents of other kinds of houses, so that the latter will need but little special explanation.

There is great inequality in the demand for house room. In 1883 the Dutch Government issued a complete return¹ of the houses or parts of houses whose tenants were at that time assessed for the *personal tax*.² It was found that Amsterdam, the metropolis of the kingdom, contained 33,240 dwellings which were exempt from taxation owing to their rents being less than 67 florins³ per annum.⁴ The estimated rentals of the remaining 32,668 dwellings were as follows:—

Estimated Yearly Rentals.	No. of Dwellings.
67 and under 100 florins	8,980
100 „ 200 „	9,507
	<hr/>
Carry forward	18,487

¹ *Bescheiden betreffende de geldmiddelen* (achtste stuk).

² The *personal tax* is a tax on house-rents, etc., paid by the occupier.

³ Twelve florins = £1 sterling.

⁴ In connection with these figures it is to be noted that according to the law relating to personal taxation as it then stood, weekly rents were converted

Estimated Yearly Rentals.				No. of Dwellings.	
Brought forward				.	18,487
200 and under 400 florins	7,004
400 " 700	"	.	.	.	3,549
700 " 1000	"	.	.	.	1,831
1000 " 1400	"	.	.	.	969
1400 " 1800	"	.	.	.	413
1800 " 2500	"	.	.	.	228
2500 florins and over	187
					<hr/>
					32,668

Were a similar return to be compiled for any other large town it would be found to reveal a similar state of things. The disparity in rents would not in all cases be so great as in Amsterdam—though in some places it would be found to be still greater¹—but everywhere it would be more or less noticeable. The causes of this disparity are well known; inequality in the size of households and similar causes account for a good deal, but not for the whole, or even the greater part of it. The chief causes, in fact, are disparity of incomes and unequal estimation of the advantages derivable from a good dwelling. We will dwell briefly upon each of these two points in order to show that their careful consideration leads to the solution of many important questions arising in connection with house rents.

People are unequally endowed with means, and as a result, every one cannot rent a house suited to his requirements. We gave above a table containing particulars of house rents in Amsterdam in 1882-83; if we examine the local income-tax returns for the same year² we find figures which at once produce the same impression. We find that 32,668 dwellings were assessed for the *personal tax* in that year, and that 38,460

into annual rents by multiplication by 33, and that monthly rents were so converted by multiplication by 10.

¹ Very complete statistics of house rents in Paris have been compiled by the Municipality of that city. The figures are given in the *Bulletin de Statistique et de Législation Comparée* (1890), Part II. pp. 338-342. They show that in 1889 there were 459 dwellings with yearly rentals of 20,000 francs (£800) and upwards. A calculation was at the same time made of the average yearly sum paid as house rent per head of the population in each of the eighty *quartiers*. The average was found to be lowest (£2, 4s.) in the *quartier de la gare*, and highest (£41) in the *quartier des Champs-Élysées*.

² See *Bijdragen van het Statistisch Instituut* (1887), pp. 373-410.

persons were subject to income-tax. These 38,460 persons were grouped as follows, according to different ranges of income :—

Ranges of Income.				Proportion per cent. of 38,460 persons with incomes between these ranges.	
600 and less than	1,000 florins	¹	.	.	49·86
1,000	"	2,200	"	.	29·26
2,200	"	5,100	"	.	12·36
5,100	"	10,000	"	.	4·87
10,000	"	20,000	"	.	2·27
20,000	"	51,000	"	.	1·13
	Over	51,000	"	.	0·25
<hr/>					
					100·00

Thus it appears that nearly one-half of those subject to the tax had incomes of less than 1,000 florins, and that only two-fifths of all the others had incomes of 2,200 florins and upwards.

In most households rent forms a very important item in the domestic expenditure. An inquiry conducted in Hamburg in 1874, and covering 14,691 examples, showed that people whose income exceeded £300 per annum spent from 3 to 10 per cent. of it on rent, those with incomes between £100 and £300 spent 17 to 21 per cent. on this item, while persons having less than £100 per annum actually spent from 21 to 32 per cent. on rent.² Figures respecting the proportion of house rent to income have also been calculated for Amsterdam. They relate to the years 1890-91, and show the proportion to have been as follows :—³

¹ Twelve florins=£1 sterling.

² *Bulletin de Statistique* (1883), L. pp. 770-772. Figures relating to other German towns will be found in Dr. G. BERTHOLD's essay on *Die Wohnungsverhältnisse in Berlin*, forming No. XIV. of the collection of essays published in 1886 by the Verein für Social-politik, under the heading, *Die Wohnungsnoth der ärmeren Klassen in deutschen Grossstädten*, Part II. pp. 219 *et seq.* See also the essay by H. FREESE entitled *Wohnungsnot und Absatzkrise* in the 1893 Jahrgang (Part 61) of the *Jahrbücher für Nationalökonomie und Statistik*, p. 645. For the families of thirty-one workmen in his own employ, Herr FREESE found the proportion of house rent to income to be, on an average, 21·83 per cent., or, allowing for receipts from sub-letting, 18·07 per cent.

³ These figures have been calculated by Mr. C. T. KNOTTENBELT. See *The Economist* (1894), p. 467. The proportion does not, however, rise continuously.

Ranges of Annual Income.				Proportion per cent. of Income spent on House Rent.
10,000 to 11,000 florins ¹	.	.	.	13·8
4,600 „ 5,100 „	.	.	.	22·6
2,200 „ 2,400 „	.	.	.	23·9
600 „ 700 „	.	.	.	26·9

It is clear that percentages of 20 and 30 cannot be exceeded in the case of small incomes unless retrenchments be made in the sums expended on items at least as necessary as house accommodation. However much a family may appreciate the advantage of a comfortable house, they must necessarily make do with a cheap one if the income at their disposal be small.

There is also a great deal of diversity in the value which people place upon the advantage to be derived from a house. We are not thinking of pecuniary advantage alone, though this has also to be considered, for many people choose their dwelling with an eye to their calling. We are thinking primarily of enjoyment, convenience. People of equal means differ widely in the matter of refinement, and the value attached to a good house is generally greater among highly refined people than among those of little refinement. The best indication of the standard of living of a nation is always afforded by its housing conditions. When we want to describe the condition of the agricultural population of a country, say Ireland or Sicily, we begin by describing the dwellings of the peasantry in that country. Disparity of means alone does not explain the unequal demand for dwelling accommodation; the want itself is not felt in the same degree by every one. And again, it may differ in degree amongst people of equal refinement, for luxury assumes various shapes. Many people are willing to dispense with a comfortable winter residence in town in order to be able to afford themselves the enjoyment of a country residence in the summer.

There are two conclusions to which we are led by the consideration of these commonplace facts. The first is, that rents cannot always be higher according as the houses for which they are paid are larger and better than other houses. It is conceivable that, in a particular neighbourhood, single

¹ Twelve florins = £1 sterling.

room lodgings may be had for four shillings, and double room lodgings for six or seven shillings per week, although the accommodation offered by the latter is double that of the former; or that one house may let for £150 per annum whilst a house next door, of double its size, will not fetch more than £240 per annum. The reason is, that the person who is about to take a house considers not alone the attributes of the house itself, but these in relation to his means and wants. The lodging composed of two rooms may be more comfortable than the single room lodging, but if a workman is not disposed to pay twice as much for two rooms as he would pay for one, and if the majority of his fellow-workmen think as he does, the double room lodging will fetch proportionately less rent. Ultimately this disproportion will indeed cease to exist. If large houses yield relatively less rent than small ones, people will cease to erect the former and will put up the latter instead, until the proper proportion has been restored; or, it may be that large houses, previously accommodating single families, will be turned into flats, double room into single room lodgings. But the disproportion may continue for some time, indeed it may continue for a very long time. In a town, for example, where prosperity has given place to decay, there will be large houses and roomy workmen's dwellings for which it is impossible to obtain rents proportionate to the advantages which the houses possess in comparison with smaller ones. The fact that a former occupant has improved and embellished a house adds but little, in many cases, to the rent which the house will afterwards fetch. The advantages imparted to the house by the improvements are admitted, but nobody is willing to pay for the luxury of enjoying them, because even before the improvements were made the house was in every way satisfactory.

Our second and more important conclusion is, that there must exist as close a connection between price and demand in respect to dwellings as is usually to be observed in respect to most other things. A rise in house rent tends to reduce, while a fall tends to stimulate, the demand for house room.

It would be wrong to urge against this, that a well-to-do man will not leave a house that suits him, simply to escape an increase in the rent, which cannot be of much consequence

to him. In saying that increase in price reduces demand, we do not mean that it reduces everybody's demand, but the total demand. To what price would wheaten bread have to rise before a millionaire denied himself the enjoyment of it? or oats, before anybody who kept a carriage would think it necessary to get rid of his horses in consequence? Suppose the tea duty were to be doubled: would this be followed by a decrease in the quantity of tea consumed among people in the highest ranks of society? When prices rise, the demand of some people, of many people in fact, remains unchanged, provided the rise be a moderate one; nevertheless, the aggregate demand falls off, because there are always some people who either cannot or will not pay the higher price.

There are some who cannot. Take a hundred dwellings, each of which lets for £80 per annum. There will certainly be a few among the occupants, who do not find it particularly burdensome to pay this rent. But there will be others who find the rent a somewhat heavy item, others who find it still heavier, and finally some who find it so heavy that they think they could not possibly pay a higher rent. And besides inability to pay more, there is unwillingness to do so. Differences in taste, requirements, and degree of refinement make it inevitable that houses of equal value should have to accommodate people differing very greatly in respect to the extent of their attachment to the dwellings which they occupy. Upon those who care very little about their dwellings the effect of an increase of house-rents would be quite different from what it would be on the others. They would move into a less fashionable neighbourhood, or exchange from a tastefully decorated dwelling to a plainer, or from a larger to a smaller one, or from a first-floor to a second-floor lodging. There are many ways of reducing one's rent, and it is not absolutely necessary to change one's place of residence in order to do so; in Berlin, in 1885, 5·87 per cent. of the households sub-let part of their dwellings, and 17·09 per cent. took in lodgers by the night.¹

In cities like Paris, where house rents are very high, only a wealthy man has such a roomy dwelling as that enjoyed by a man of moderate income in a country like Holland: a further

¹ *Statistisches Jahrbuch deutscher Städte* (1890), p. 80.

proof of the truth of the proposition which we are here defending, and which, it seems to us, should form the starting-point of a true theory of house rent.

As yet, however, this proposition does not meet with general acceptance. There was a time when every rise in the price of bread was ascribed to the greed of bakers or the speculations of corn-merchants; every rise in the rate of interest to the unwillingness of capitalists to lend their "money" on reasonable conditions; we even have an example (in Naples, at the beginning of the seventeenth century) of the fixing by Government of a maximum price for foreign bills of exchange. Gradually the conviction has gained ground that high prices, if arbitrarily fixed, cannot be maintained. But though this is understood to be true of things in general, many are still disposed to doubt its truth in the matter of dwelling accommodation. When house rents go up, people often look for the cause in every direction but the very one in which alone, if the rents continue high, it is to be found, namely, in the want of equilibrium between demand and supply. As with every kind of commodity bought and sold in a wide market, so with every class of dwelling in all large towns, there is a point at which demand and supply balance each other; this point is determined by the *marginal utility* of these dwellings, to use once more the technical term of the modern theory of Value. Suppose 100 dwellings to be vacant, and 60 people to be ready to pay £100, 25 to pay £90, 10 to pay £80, and 5 (or more) to pay £70. The marginal utility is now expressed by £70, and this will continue to be the rent which it will be possible to obtain for these dwellings provided that the number available remain unaltered, and that the 10 people willing to pay £80 do not increase in number to 15, for example. The house-owners may put the rents at a higher figure if they like, but if they do, some of the dwellings will remain untenanted; 5 if £80 be asked, 15 if the owners refuse to take less than £90, and 40 if they ask £100.

In the long-run, no dwellings will remain untenanted. The supply in this case is unconditional—always provided the rents actually yielded by the dwellings exceed the expenses of repair and maintenance, together with the taxes falling upon the owner. We are therefore justified in concluding that the

“marginal utility” in this case regulates not only the value but also the price.

What has here been said of dwellings applies equally to shops, the more so as these are often connected with dwellings. The motive of the demand is different, it is true, in respect to premises of this kind; people rent shops just as they rent a piece of land, in order to earn an income. But this rather strengthens than loosens the connection between price and demand, since, with the shopkeeper, the rent of the shop forms part of trade expenses, and it is important for him that the sum total of these expenses should be sufficiently below the gross receipts to leave him what he considers a fair profit. The same may be said of offices and warehouses. But in small localities, where certain kinds of dwellings are represented by only one, or at the most two specimens, the general law, to which we have just called attention, does not at all times apply, owing to the absence of the conditions necessary for its operation. In such localities there does not exist, in respect to all dwellings, a supply or stock capable of being divided into a number of parts. It is hardly correct to speak of a value in such isolated cases; the rents actually paid depend upon varying circumstances. Chance has sometimes a good deal to do with them.

§ 2

Ground Rent

We must now analyse the rent of houses; this will enable us to see that in very many cases it is composed of two parts, ground rent and house rent strictly so called. By ground rent we do not mean the rent which could be obtained for the land upon which the house is built if that land were to be used for agriculture or stock-rearing; rent of the last-named sort is so small that we need have no hesitation in neglecting it when treating of house rent. Suppose the land be of first-class quality, and therefore worth a rent of £5 per acre; even this does not amount to more than $\frac{1}{8}d.$ per square foot. The maximum amount of agricultural rent comprised in house rent, therefore, can certainly never exceed as many times $\frac{1}{8}d.$ as the area covered by the premises contains square feet. In all future

observations and calculations we shall treat as a negligible quantity the rent which building land would be capable of yielding if it were used for purposes of agriculture or stock-rearing. What has just been said justifies our doing so.

By ground rent we mean the rent that land already built upon, or suitable for building purposes, is capable of yielding, owing to its being situated in a populous centre, and owing to the fact that land is necessary for every kind of building property, and that well-situated building land is often scarce. The price of building land is its capitalised ground rent, just as the price of agricultural land is its capitalised agricultural rent. Whenever a building site becomes vacant in a fashionable neighbourhood, owing to the house that stood upon it being destroyed by fire or other causes, many people are at once prepared to pay a certain sum, frequently a large sum, for the site, knowing as they do, that the building to be erected upon it will yield a larger sum per annum in the shape of rent, after deducting cost of repairs, etc., than they could get in the shape of interest from the capital required to erect the building. This excess of the annual sum yielded in the shape of house rent over the annual interest yielded by the building capital constitutes the ground rent. The Dutch *impôt foncier*, which makes a distinction between properties which are built upon and those which are not, reckons the ground rent as part of the income yielded by the former; in the income derived from the latter it includes only the trifling sum which constitutes the agricultural rent referred to above. In order to make a strictly scientific division, it would be necessary to adopt a different method, and an investigation carried out some years ago in Berlin affords grounds for believing that the practical difficulties would not be insuperable. It was known what rents the various house properties were capable of yielding; it was also known for what sums the houses were insured, these sums being, of course, exclusive of the value of the ground. The result of the calculation showed that, in Berlin, house rents included on an average 40 per cent. of ground rent.¹ It is, in most cases, quite possible to estimate the price which could be obtained for a building site. By calculating a

¹ See article by J. LEHR, entitled "Wohnungsfrage," in the *Handwörterbuch der Staatswissenschaften*, Part VI. p. 732 (first edition).

certain percentage of that price, say 4 or 5 per cent., we shall find how much ground rent is included in the house rent.

The importance, scientifically, of distinguishing ground rent from house rent properly so called, will become evident as we proceed with our inquiry. For the present, we shall confine ourselves to observations intended to acquaint the student more closely with the nature of ground rent, and certainly the most important matter to be pointed out in this connection is the close relationship which exists between ground rent and agricultural rent. The latter has its origin in the fertility, but also in the situation of the land; ground rent originates in the situation of the land and in that alone. But apart from this, a great deal of what has been said with reference to agricultural rent applies to ground rent as well. We remember RICARDO's statement: "Corn is not high because a rent is paid, but a rent is paid because corn is high." Something similar might be said of ground rent. House rents are not high because the ground upon which the houses stand is very valuable; but the ground is very valuable because high rents are offered for the houses which are built, or may be built, upon that ground. RICARDO further states that corn would not become cheaper if the landowners were to forego their rent, and these words also express a truth capable of being turned to account in the question with which we are now dealing. In London, many building areas are let on long leases at a ground rent: the house rents would not fall supposing that the ground rent had no longer to be paid. Frequently the high prices charged in some places for building land are stated to be the cause of the high rents charged for the houses. It will be our business to show that this is a confusion of cause and effect and that house rents would not be lowered even though the land were given away instead of being sold.

In the fact, too, that it does not admit of annihilation for the time being, ground rent affords another indication of its affinity to agricultural rent. The landlord may let his land for less than its full competitive rent, but in doing so he foregoes a portion of that rent in favour of the user of the land. In the same way, a portion of the ground rent may be diverted from the pocket of the owner of building land; that is what

happens when, instead of having a house built on the land at his own cost, and then letting such house, the ground-owner sells his ground to builders.¹ These *entrepreneurs* will not be satisfied with a very moderate rate of interest on the capital they intend to lay out, they will want to get a somewhat higher percentage on their money. This additional percentage will be a part of the ground rent which the owner of the ground has had to abandon to the *entrepreneurs* in order to relieve himself of all risk. And even though the *entrepreneurs*—who may be shareholders in a society existing for philanthropic purposes—should be willing to forego this advantage by fixing the rents at a low figure, the ground rent would still exist. The occupier of a dwelling which is being let at less than its full market rent may be likened to the tenant farmer whose landlord has given him the use of land at a lower rent than it would have fetched in the open market.

The error here pointed out is so general that it will be worth while to trace its source. There are two reasons why prices of building land—and therefore ground rents—are sometimes supposed to influence house rents. The first reason is, that builders, in their calculations, never make any distinction between their disbursements for the ground and their disbursements for other purposes; both are reckoned as “costs.” Nevertheless these two kinds of disbursement differ generically. The prices of material and rates of wages in a town are influenced in some measure by the competition amongst local builders; but this influence is far from amounting to absolute control over such prices and wages. The prices of building land, however, are entirely controlled by this cause, being high or low according as builders calculate upon getting high or low rents. The labour and materials possess a value which is, in a great measure, independent of local conditions. They are influenced only to a limited extent by the local demand in the building trade. Building land, on the contrary, owes the whole of its value to local causes, since no builder will pay anything for it unless there is a reasonable

¹ The sense in which the expression “builder” is used throughout this chapter is that of a person who builds a house with a view to letting it. The Dutch expression, which it is intended to translate, is *bouwondernemer*, i.e. *building-entrepreneur*, a somewhat cumbrous term.—A. A. W.

prospect of his being well recompensed for the outlay. The probable amount of such recompense regulates and limits the amount of his offer, and depends upon the rents which houses are fetching. If, therefore, the sum which a builder will offer for building land be determined by the rents which houses are fetching, how is it possible for that sum to influence those very rents; or how can it rightly be placed in the same category with the actual building expenses?

The second cause of the error to which we draw attention, lies in the fact that the supply of building land is not always unconditional. Building areas, which are expected to rise considerably in value before long, are only offered at prices which builders regard, for the time being, as excessive. But offering a thing at a price which exceeds its value is not offering it in reality, and that which is only apparently offered is really being withheld from the market. We have never meant to deny that house rents were affected by the amount of building land actually available. They are bound to rise whenever increased demand for dwelling accommodation is accompanied by lack of opportunity for building, and it matters not whether this lack of opportunity be due to the want of suitable building areas or to speculation on the part of the owners of such areas. In the latter case, however, the effect is temporary, since it never happens that land which is both suitable and intended for building purposes, is kept out of the market for good. A moment ultimately arrives, when the loss of interest which the owner must undergo, if he persists in waiting, becomes too great in his estimation, and then the land, which he has been withholding for reasons of speculation, gets into the market. It constitutes no exception to this rule, that such land as that comprised in public recreation grounds, parks surrounding Royal palaces or the residences of very wealthy people, or land which the owner could not convert into money without greatly reducing the value of his other property, remains unsold. All such land is withdrawn from the market for good. It has to be left out of account in considering the question: what are, or will be, the opportunities for building? We have been speaking only of actual speculation in building land; and of this it is true to say that it only impedes the *immediate* supply of such land. It never impairs

the growth of a town permanently, but checks it for a given time. And this check is not caused by the fact that a price is asked for the land; it is entirely due to the fact that the price asked is more than the land is worth at the time, that it is a price which exceeds the capitalised ground rent, or comes too near it to allow builders a sufficient profit. In other words, the check consists in the temporary withholding of land from the market.

One thing further before we proceed. It has been stated that the ground rent is indestructible for the time being. It may, however, be rendered *latent* for a time, and this is another of the characteristics which it possesses in common with agricultural rent. If a landlord were to prohibit his tenant from growing those crops which yielded the largest return, or to insist on his allowing the land to lie fallow once in a certain number of years, without there being any necessity for such a course, he would have to content himself with a low rent. In the same way the owner of building land may, when selling it, impose upon those who desire to erect houses upon it, conditions under which the highest possible house rents are not obtainable. In London, for example, the Metropolitan Board of Works, in the exercise of powers which it acquired in 1875 and 1879, bought up seven acres of land (having a population of 20,335 persons), together with the houses standing upon it, pulled down the houses, and offered the sites for sale subject to the condition that only good workmen's dwellings should be erected upon them. The result was, that 3s. 8d. per square foot was all that could be got for the land—far less than the Board of Works could have obtained if they had put the land in the market unconditionally—and that a loss of £1,211,336 was sustained.¹ In this case the ground rent was rendered latent. If these sites were to become vacant again and to be sold unconditionally, the full ground rent, supposing that it had not changed in the meantime, would become manifest.

Ground rent enters into the composition of many, but not of all, house rents. The towns and villages of every civilised

¹ T. REYNOLDS, *The Housing of the Poor in American Cities* (vol. viii. of the publications of the American Economic Association), p. 46.

country, and of many semi-civilised countries, admit of being divided into four groups. We shall indicate each of these groups, and in the course of our inquiry into the causes which regulate house rents, we shall endeavour to ascertain whether causes which influence the rents of one group also influence those of the other groups, and if so, whether the influence is of the same or of a similar kind.

In the *first* group we class places where no ground rent whatever is embodied in the house rents, owing to the fact that building land is plentiful on every side. Such places are only to be found in country districts, and only in country districts where the houses are separated from each other by open spaces, and where parts of these spaces may at any time be had for sums equivalent to their capitalised agricultural rents. In order to avoid the danger of being casuistical, however, we also include in this group places in which building land, as such, possesses so little value that the interest on the money which the land fetches amounts to a few shillings only.

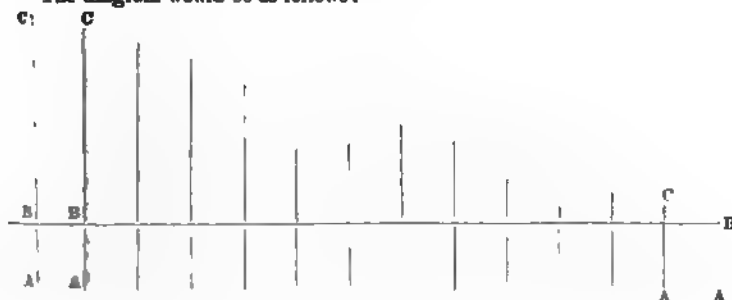
The *second* group also consists of places where the house rents contain no admixture of ground rent; but in this case the reason why they include no ground rent is quite different. At some former time the town was prosperous and many houses were built; but prosperity waned and houses fetched much lower rents; and even though the period of decline may have been succeeded by a period of revived prosperity, it would yield no profit to build a house in that place. Dwellings are cheap and roomy, and the rents paid for houses are considerably less than the interest obtainable for such a sum of money as would be required in order to build the houses. If to this interest there be added the cost of repairs and the taxes falling upon the owner, the difference will be found to be very considerable indeed.

In the places constituting our *third* group, things are otherwise in regard to house rents. Their condition may be represented by a horizontal row of points indicating the sites of houses of the same kind, it being understood that, according as we proceed from left to right, the position becomes less favourable. If we were to draw a vertical line over each of these points, to show the interest on the building capital and the

cost of repairs, all the lines would have to be of equal length, since the houses represented in the diagram would all be of the same kind, only differing as regards situation. But if we were to extend each line, so as to show by how much the rents yielded by each of the houses exceeded the interest and cost of repairs, the lengths to be added in each case would become shorter as we proceeded from left to right, and the line over the last point would have to remain as it was. The lengths added would be the ground rents, and the purpose of the diagram would be to show that these become smaller as the situation becomes inferior, and that ultimately they disappear altogether.¹ In short, we are now thinking of towns with building land situated in an out-of-the-way neighbourhood, in which people will not settle unless they are unable to find good dwelling accommodation at a reasonable rent in any other part of the town, or find it necessary to economise. In such towns most of the house rents comprise some ground rent, though not all of them. There is a part of the town—let us rather say there are different spots within the limits of the town, for such is usually the case—where building is still profitable, but only on land for which no ground rent is asked. To express it in the language of our diagram: on these spots the lines AC (rent obtained for house) and AB (interest on building capital and cost of repairs) are of equal length.

We come now to the *fourth* group. This group comprises towns where there is absolutely no building land, either because the place is enclosed within walls, or because it is encircled by high mountains or deep waters. There are

¹ The diagram would be as follows:—



AC = Rent obtained for house.
AB = Interest on building capital (exclusive of purchase of ground) and cost of repairs. At the farthest point AB and AC coincide.

not many such towns; but here and there we find parts of towns, which, in an economic sense, are, as it were, insulated; where, therefore, the house rents stand in a very remote relation to those of the other quarters of the town. In London, those who want to engage in certain classes of business are obliged to have an office in the City; restaurants and large shops cannot be established in every neighbourhood; many industries connected with shipping must be carried on near the docks. In special cases like these, people have no choice. But even when we are not tied by such external things, we may be tied in other ways. Persons of high social position consider that their rank requires them to live in a certain quarter of the town. Sometimes a fashionable locality of this kind is enlarged, or others are created, by the opening up of new streets or squares. Until this takes place, however, there exists a zone, traced by social influence, and outside this zone it is very difficult for any one belonging to the best society to reside. In tracing the causes which determine house rents such cases have to be taken into account.

Let us endeavour now to trace, in succession, the effects upon house rents of (a) local increase of income; (b) changes in the cost of building or in the rate of interest; (c) taxes levied on houses and borne by the owners; and (d) personal taxes borne by the occupiers of houses in their capacity of occupiers.

§ 3

How are House Rents affected by Increase of Income?

What effect has local increase of income—that is, of profits and wages—upon house rents in places belonging to the first of the foregoing groups? According to our hypothesis, building land is so plentiful in such places that, even though the population were to increase considerably, it could cause no scarcity of land for the building of well-situated houses. This being so, it is clear that, so long as this condition of things remains unchanged, house rents cannot rise beyond a point at which building will yield a normal interest. Assuming that at the time when the movement began house rents had already reached this point, then there will be no rise at all.

In places of the second group where, owing to former decay, house rents are so low that, at first, there could be no question of putting up new houses, the rise in profits and wages will, as in places of the first group, cause the population to increase, but not to the same extent; for in this case, as soon as the population increases, house rents will go up, and this will prove a check. Those who contemplate settling in such a place will note that dwelling accommodation has gradually become dearer. Still the check cannot be very powerful if there be suitable building land on the outskirts of the town, as then the rise in house rents will quickly reach its limit.

We assumed that, in towns of the third group, ground rent had almost everywhere to be paid, and that building land could only be got in an out-of-the-way neighbourhood. Here, also, increase of incomes will cause increase of population, and house rents must go up in consequence. The lines AC—to refer once more to our diagram—will all have to be lengthened, and the marginal point—as we shall call the spot where building is just profitable, provided no ground rent has to be paid—will be shifted further out. If incomes go on increasing, and opportunities for earning money are multiplied, we find the town increasing very much in size, so that sites which, a few years ago, were on the outskirts, are now central. The United States furnish the most noteworthy examples of this, but even in Europe many towns have attained to great dimensions in a relatively short time. Opportunities of earning larger incomes than elsewhere must have multiplied at a great rate during the nineteenth century in the nine largest cities of Europe; how, otherwise, are we to explain the fact that, between 1833 and 1873—a period of forty years—their population rose from 5,582,000 to 10,595,000 souls? In Berlin, more especially, the population has increased remarkably in recent times. In 1852 it was 432,000, or less than the population of Amsterdam at the present day; in 1891 it was 1,579,000. Within about the same period (1851-1891) London has increased in population from 2,373,000 to 4,211,000, and Paris from 1,227,000 to 2,424,000.

The check of which we have spoken did not fail to

operate in these cases. House rents rose considerably.¹ If we compare them with house rents of the eighteenth century we are astonished at the difference. In 1716 a large house, with a carriage-entrance, in the Rue Mauconseil in Paris, fetched only £68 per annum;² in 1889, the average rent of a dwelling in six of the eighty *quartiers* of Paris exceeded this sum, and, in the *quartier* of the Champs-Élysées, it was £119, 8s., whilst 2,719 dwellings fetched rents of £400 and over. The rise in house rents has not everywhere been so marked as this; but there is not a single large town where they have not risen, and this is not altogether a matter for regret. When wages increase, the proportion of income to be set apart for house rent may increase both absolutely and relatively, yet the condition of the worker may improve steadily. Suppose, for example, that at first he earns £50 per annum, and pays £10 or 20 per cent. of his income for house rent, and that later on he earns £70 per annum, and spends £21 or 30 per cent. on house rent; after these changes he will still be better off to the extent of £9 per annum. But what would the housing conditions in large towns have been if house rents had not risen! Even as it is, the density of the population is something alarming. In 1890 there were in London 34,974, in Paris 80,311, in Berlin 64,508, and in Amsterdam 32,508 inhabitants to the square mile. Within a radius of 500 yards of the centre, the population had a density equivalent to 157,096 inhabitants per

¹ In the collection of articles entitled *Die Wohnungsnoth der ärmeren Klassen*, published by the Verein für Social-politik (Part II. p. 219), Dr. G. BERTHOLD gives the following figures for Berlin:—

	1840-41.	1860.	1880.
Rents of less than £4, 10s.	18·69 per cent.	9·70 per cent.	5·68 per cent.
„ £4, 10s. and under £7, 10s.	81·98 „	26·09 „	18·32 „
„ £7, 10s. „ £15	24·82 „	82·15 „	87·95 „
„ over £15	24·81 „	32·06 „	45·05 „

We learn from another essay by the same author in MAYR's *Allgemeines Statistisches Archiv* (Jahrgang, 1892, p. 486), that, in 1886, dwellings rented at £10 per annum constituted 30·2 per cent. of all dwellings in Berlin, while in 1880 they constituted 19 per cent. only.

See also the interesting figures relating to Berlin given in the *Jahrbücher für Nationalökonomie und Statistik* (1893, pp. 652-653), by H. FRESE. They relate to the years 1868 and 1877.

² See G. D'AVENEL, *Histoire économique de la propriété* (Part I. chaps. ix. and x.), where a historical account is given of house rents in France from the year 1200.

square mile in Breslau,¹ and 143,565 in Amsterdam. The increase of house rents has not stopped, but it has checked the growth of population in large towns, and this must be recognised as one of its good features. Just as in the case of failure of corn crops, the high price of bread prevents the depletion of stocks of corn; so does increase of house rents prevent the crowding together of humanity in places in which the chances of earning a living have increased, and which have, in consequence, acquired a great power of attracting population from other—perhaps remote—parts of the country.

What has just been said applies equally to towns of the fourth group, which are not in a position to enlarge their boundaries. We need not go into particulars to prove this, and may now lay down the following general proposition embodying the results of our inquiry: When profits and wages increase in a town, house rents in that town will rise, and the population will increase. Either of these two results tends to bring about equality between the advantages connected with living in that town and those connected with living in other towns. The greater the available area of well-situated land in the town, the more will this equalisation be brought about by increase of population; in proportion as such land is scarce it will be brought about by increase of house rent. This increase in house rent will, in most cases, be an increase of that part of house rent which consists of ground rent.

Throughout the whole of the foregoing demonstration, we have been assuming increase of prosperity in a town to be in every case the cause, and never the effect, of an influx of population to that town. We do not propose just yet to refute the erroneous contention that increase of population leads to increase of wealth; this we shall do in a later chapter. We may remark, however, that there is certainly one case in which prosperity results from an influx of population, and that is when the new-comers belong to the moneyed classes. It must be conceded at once, that the wealth of a place is greatly promoted by the settling in it of people who possess

¹ See the essay by E. Hasse in MAYR'S *Statistisches Archiv* (Jahrgang, 1892), pp. 615 *et seq.*

large incomes. But although the settlement of such people in a town must be ranked among the causes which bring about increase of profits and wages in the town, that is to say, increase of opportunities of earning an income, it is not to be ranked among the causes which contribute *directly* towards a considerable increase in the population. Well-to-do people never immigrate in sufficient numbers to bring about the last-named result. In most cases the effect of their immigration is to attract less wealthy people to the place.

The greatest and most rapid increases of population are to be observed in towns specially adapted by their situation for the carrying on of commerce or industry. This has been shown with great clearness by WILHELM ROSCHER in an essay which appeared in the third edition of his *Ansichten der Volkswirtschaft*.¹ In that essay the author has proved that the origin of very large towns may in all cases be traced to this cause. Even though some of ROSCHER's statements will not stand the test of critical examination, the general trend of his reasoning is correct. The great increase in the population of Paris is in apparent conflict with this, but ROSCHER shows that his proposition is proved by that very increase. Paris has gradually become a great centre of commerce and industry for the export trade, and its prosperity is due in far greater measure to this, than to the fact that foreigners visit it, and persons of independent means settle there.

§ 4

How do Changes in the Cost of Building and the Rate of Interest affect House Rents ?

The cause of which we are now about to speak also produces effects which differ according as a town belongs to one or the other of our four groups. In towns of the second group, where no profit can be made out of building, and in towns of the fourth group—or in localities where conditions similar to those of this group exist—it produces, in most cases, no effect whatever upon house rents. We will give a few illustrations. A house which lets for £20 costs

¹ Part I. pp. 317-362. *Betrachtungen über die geographische Lage der grossen Städte.*

£2,000 to build, and £15 per annum for repairs, etc. Now, even if the cost of building such a house were to fall from £2,000 to £1,000, and the rate of interest from 5 to $2\frac{1}{2}$ per cent. per annum, there would still be no profit to be made by having a house of this kind built. This is an illustration that has reference to the second group. Suppose, however, that the house let for £200 and not for £20 per annum, while there was no vacant space for building, and that it was precisely this want of vacant space which caused the rent to be so high. Here again, change in the cost of building or in the rate of interest would be without any effect. And this is the condition of things existing in towns of the fourth group.

In country towns, on the contrary, where there is abundance of building land on all sides, the cause which we are now discussing exercises a powerful, and, in most cases indeed, a determining influence. There a house must be regarded in the same way as any other product, and therefore as subject to the general law in virtue of which value and cost of production in the long-run coincide. As a house is capable of being enjoyed for many years in succession, the law sometimes operates more slowly here than in the case of other kinds of commodities; nevertheless it does operate, and with a certain rapidity, when the population is increasing. The rent paid for dwelling accommodation will be low according as building expenses and rate of interest are low. The higher these are, the more will the increasing population have to pay for its dwelling accommodation. The fact that in colonies and newly peopled countries house rents are particularly high, seems in most cases to result more from the rate of interest than from the cost of building. Capital is scarce in such countries and is seldom to be had for less than 7 or 8 per cent. per annum; frequently a higher rate of interest has to be paid. This greatly increases the rent for which it is possible to supply dwellings. It makes a considerable difference whether the capital employed in building has to yield $3\frac{1}{2}$ to 4 per cent., or whether it must yield double that amount per annum; in the former case, a house which costs £1,000 to build can be let for a net rental of £35 to £40 per annum; in the latter case, £70 to £80 per annum will have to be charged for it.

All this is too simple to need further explanation; it is

easy to show how house rents will be influenced in towns belonging to the first, second, and fourth groups by changes in the cost of building and rate of interest. It is only in considering towns of the third group that we encounter difficulties. For in the towns of this group, a certain amount of ground rent is included in the rents of most, though not of all, houses. Opportunities of building exist as a rule only on the outer fringe of the town, and problems arise in consequence, the solution of which requires some care.

Let us first consider the rate of interest. Regarding the matter superficially, we might be inclined to think that a reduction in the rate of interest from say 5 to $2\frac{1}{2}$ per cent. must necessarily have the effect of reducing all net house rents—by which we mean house rents after deducting cost of repairs—by one-half. Or a conclusion diametrically opposed to this might be drawn. House rents will not change, we might say, but the price to be paid for houses and building land will be doubled, just as we see the price of certain securities being doubled when the rate of interest is permanently reduced by one-half. Neither of these opinions would, however, be quite correct. A reduction in the rate of interest operates in a manner much less simple than this in towns of the kind with which we are now concerned, whose conditions in respect to house rents are represented in our diagram.¹

Let us look at this diagram once more, especially at the perpendicular lines of unequal length, representing the rents of a number of dwellings which, except as regards situation, are all equally good. Now, must there exist between the lengths of these various lines a certain inevitable *proportion*, or merely certain *differences*? Our meaning will perhaps be clearer if we repeat the question in another form. Two dwellings have the same dimensions; they are in equally good repair; in fact, the accommodation which they provide is equal in all respects. One of them, situated at the point where building land has no value, fetches a rent of £60; the other a rent of £120. Between the two rents there exists:—

a proportion of 1 : 2,
a difference of £60.

¹ See *ante*, p. 141.

Now, which of these figures is the result of some economic law? Which merely accidental? If the £60 rent were to fall to £30, would the £120 rent fall:—

$$\begin{array}{l} \text{to } 2 \times £30 = £60, \text{ or} \\ \text{to } £30 + £60 = £90? \end{array}$$

The whole problem is involved in this question. The answer, we think, is as follows:—

The proportion is merely accidental; we should search in vain for a cause, in virtue of which it must inevitably be what it is. A house in a fashionable neighbourhood is worth more than a house on the outskirts of the town, because dwelling in a fashionable neighbourhood confers social or other advantages. If, at a given time and in a particular case, we value these advantages at £60, there is no reason why we should value them at a higher or lower figure than this after the rents of houses at the outskirts of the town have fallen. This fall will have an effect on house rents in general, but the effect will not go beyond causing the rents of all houses, which are similar in every respect except position, to be reduced by an equal amount, or, as it would be expressed in our diagram, cutting off from each of the lines AC equal portions of the line AB.

As regards a reduction in the rate of interest, the direct effect will simply be to reduce the rent at which a house can be supplied at the “marginal point.” Building will now be engaged in more extensively than before; house rents on the outskirts of the town will fall, and gradually the fall will become general. But the differences will still remain the same—that is to say, the ground rents will, for they are made up of those differences. What has fallen is the house rent properly so called, and nothing else.

There are two objections which might be urged against this proposition. One of them is this. Granted that a reduction in the rents charged for houses on the outskirts of the town has no effect upon the value which people attach to the advantages of residing in the better neighbourhoods, the fact remains that a general reduction of house rents will cause an increased demand for houses occupying more favourable positions. If an article goes up in price many of those who have been in the habit of using the better qualities of that

article will purchase an inferior quality, and the differences in value between its various qualities will become smaller. When an article becomes cheaper the reverse takes place; the fall in price is usually most marked in the case of the lowest qualities and their substitutes. Why should not this apply in the case of dwellings? There is no reason, indeed, why we should expect to find any fixed *proportion* between the rents fetched by houses in the different localities, and it may be conceded that in this case *differences* are the determining causes. But after admitting all this, we are not bound to regard these differences as entirely independent of the figures to which they relate.

The force of this objection is not to be denied. It may be observed, however, that the cause to which the reduction in house rents has, in this case, been assumed to be due, has also the effect of reducing the incomes of capitalists, consequently of rendering them less able to pay high rents. But this will have little effect in a town where industrial and professional incomes greatly preponderate over those derived from capital, so that the objection still holds good. As a matter of fact, when an all-round fall in house rents is brought about by causes other than decline of wealth, the demand for houses situated in good localities will increase. As a result of this, the differences here spoken of will become somewhat greater than they were before.

A second objection might be, that whatever produces a general fall of house rents in a town, causes people to flock to that town in larger numbers. This objection, however, has less force than the first one, because a fall in the rate of interest is always general, never local. When it falls, it falls in all civilised countries, and, as the effect upon house rents is most potent in extra-urban districts, it can hardly stimulate immigration into towns.

After what has been said, it will not be necessary to speak in detail either of increase in the rate of interest or of change in the cost of building, since the effect of the former is exactly the reverse of that of a decrease in the rate of interest, while the effect of a change in the cost of building must be the same as that of a change in the rate of interest. If it be possible to supply a house at a lower rent now than formerly, it matters not whether this be due to a 30 per cent.

reduction in the cost of building or to the fact that the capitalist for whom the house was built is content to take $3\frac{1}{2}$ instead of 5 per cent. interest on his money. The effect upon house rents, in so far as there is any, will be the same in both cases.

Summarising the results of our inquiry in this section, we arrive at the following conclusions:—

The effects produced upon house rents by changes in the rate of interest and in the cost of building are most marked in towns where there is a constant demand for new dwellings, but where there is no difficulty in supplying that demand, because of the abundance of building land.

Such changes have no effect whatever in towns where the rents yielded by house property are much below the interest on the money that would be required in order to build and keep such property in repair; neither have they any effect in towns where there is no vacant land for building.

In towns where vacant building land is only to be had at the outer fringe, and where ground rent has to be paid in the parts already built upon, the effect is confined to house rent properly so called. The rents of each class of house only rise or fall to the extent that they would rise or fall if no ground rent entered into their composition. It must be observed, however, that here, as in the case of other commodities, we have in operation the general economic law, in virtue of which the difference between the prices of the higher and lower qualities of an article becomes greater when the price of that article falls, and less when it rises.

§ 5

How do Taxes levied on Houses and borne by the Owners affect House Rents?

One of our reasons for discussing the last subject at some length was that the problems which it comprised were the same as those which we have now to solve, and that the solution will be almost precisely the same in this case. When an *ad valorem* tax on the gross rents of houses is levied on house owners, it operates in the same way as if a proportionate rise had taken

place in the cost of building or the rate of interest. If, for example, the tax be one of 10 per cent. its effect will be the same as if building were to become 10 per cent. dearer, or the rate of interest were to rise from 5 to $5\frac{1}{2}$ per cent. per annum.

This will at once be evident in regard to house rents in towns of the first group, where there is an abundance of building land on all sides. The builder wants to get a rent which will bring him a certain income. If a part of the rent be taken from him by the Exchequer, he will wait until rents shall have risen by an amount corresponding to that part before he makes up his mind to build. A house property tax has been described as an excise duty on dwelling accommodation. The description is true in the case of localities of the kind with which we are for the moment concerned; that is, if their population be increasing, so that there is a continual demand for new dwellings.

It would be altogether wrong, however, to use the same expression as applicable to the effect of the tax in towns where building is out of the question, either because house rents are too low, or building land is not to be had. How is the house owner to recoup himself for the tax in such towns? His tenants would object to pay more rent if he were to ask them, and he could do nothing against their objection. In the towns first spoken of, dwelling accommodation becomes scarce if house rents do not rise to the full extent of the tax, but in towns where, even prior to the imposition of the tax, building was either unprofitable or impossible, the supply of dwelling accommodation remains precisely the same, even though rents do not rise. Restriction of supply is the only means of coercion which those who bring an article to market can apply in order to dictate the price to consumers; this applies to house rents in the same way as it does to the prices of articles of commerce.

This disposes of the question in so far as it relates to towns belonging to the first, second, and fourth of our groups. It is only with regard to towns of the third group—the one to which our diagram¹ relates—that difficulties arise, just as they did in connection with the question dealt with in the previous section. But these difficulties vanish the moment

¹ P. 141, *ante*.

we know that the differences between the rents yielded by dwellings which are only dissimilar in respect of situation, are determined by the valuation of the advantages which a well-situated house confers in excess of those conferred by a house occupying a less favourable situation. The importance of the conclusion at which we arrived when we asked whether there was anything inevitable in the proportion existing between the rents of differently situated houses, again becomes apparent. Had we found the answer to that question to be in the affirmative, we should now have to conclude that in towns of the third group also, the occupants of the houses would have to bear the whole weight of any tax consisting of a fixed percentage on house rents. But as the answer was in the negative, we are in a position to prove that the tax will only be borne by the occupants of the houses in so far as it affects the house rent properly so called, and not the ground rent. We will give an illustration. A house fetches a rent of £200, of which £140 consists of ground rent. A house property tax of 10 per cent. is imposed. The rent will not be increased by £20, but only by 10 per cent. of £60, that is, by £6. The remainder of the tax, viz. £14, will be borne by the owner.

The proof is merely a repetition of what was stated in the last section. There are two exactly similar houses. The one, situated at the outskirts of the town, fetches £60 per annum; the other, situated in a fashionable neighbourhood, £200. It follows, therefore, that the advantages of living in the fashionable neighbourhood are valued at £140. Suppose now that a tax is imposed, and that it is the intention of the owner of the houses to make the occupants pay the whole of it. In order to do so, he will have to raise the rent of the £60 house to £66 and that of the £200 house to £220. There will then be a difference of £154 between the rents, whereas £140 is the amount which people are willing to pay for living in the better locality, and it is quite certain that the imposition of the tax will not have the effect of inducing them to pay more. The dearer of the two houses, therefore, can only rise from £200 to £206 (£66 + £140). But even then the greater part of the tax, viz. £14, falls upon the owner, and that sum of £14 is just 10 per cent. of the ground rent.

But perhaps some one will remind us of the two objections which we ourselves suggested in the course of our inquiry into the effect of changes in the cost of building and the rate of interest. The reminder would only render our proof the easier, since it would enable us to see that the occupier's share of the burden of the tax may even be over-estimated here. The difference in price between the higher and lower qualities of an article diminishes when a general rise occurs in its price; this being so, the difference in the rents, viz., £140, instead of increasing to £154, will diminish somewhat, and the owner will have to bear even a larger share of the tax than we have been assuming. When the house rents of a town become lower, the flow of population to that town increases; if that be true, the effect is just the reverse when rents rise, and there is an additional reason for believing that the owner will bear a greater share of the tax than that deduced from our figures. We now see that, as regards the occupier, these figures show only the maximum share of the tax which he will have to bear. It is certain that the owner bears the tax in so far as it is reckoned on that part of the house rent which is made up of ground rent; but it may be that he pays even more.

This conclusion appears to us to be of importance for more than one reason. In the first place it emphasises the importance of the distinction between house rent and ground rent properly so called, and places the importance of that distinction in a new light. In the next place, it directs our attention to the fact that a tax upon the rents yielded by houses must, when those rents contain a considerable proportion of ground rent, be regarded primarily as a tax on the special income which the owners of houses in good localities derive from the circumstance that their houses are situated in those localities; in these cases also, the effect of such a tax would be very imperfectly described by the expression "excise duty upon dwelling accommodation." Lastly, owing to our having arrived at the conclusion referred to, we now know that for the occupiers it is only important that the tax imposed upon houses *that have yet to be built* be a low one, since it is only by the raising of the rents of those houses that a general rise in house rents is brought about.

It is immaterial to the occupiers whether, or to what extent, existing houses are taxed; always provided the tax does not reach a figure such as, together with the cost of repairs, would equal, or very nearly equal, the whole of the rent paid for the house. RANKE, in his *Zwölf Bücher Preussischer Geschichte*, relates how, in 1667, the Great Elector, in order to encourage the growth of towns in his dominion, greatly reduced the taxes on house property, which were very heavy, and imposed an excise duty instead; the measure is stated to have produced favourable results, for, within two years, the number of houses in Berlin increased by 150. The Elector would have attained his object equally well had he left the taxes upon existing houses unchanged, and partly exempted new houses. He would even have attained his object better in this way, since the excise duties which he imposed must have had the effect of checking to some extent the demand for houses. Or, again, he might have exempted new houses from the tax for a long series of years.

Many such exemptions were allowed under Section 5 of the Dutch law of May 26th, 1870, relative to the Taxation of Real Property. In the case of house property built on waste and newly reclaimed land, a period of eighteen years was allowed to elapse before the tax was due; in the case of buildings situated on land newly drained or enclosed within dykes, a period of thirteen years; and in the case of houses on other kinds of land, six years. But under the law of July 20th, 1884, these temporary exemptions were withdrawn with certain exceptions. This was greatly to the advantage of the State Exchequer, but it was also to the advantage of the Municipalities, these being allowed to add 40 per cent. to the house-property tax for their own benefit. The taxable incomes from such property amounted, in 1876, to £6,208,000, and in 1884 to £7,085,000; so that in the course of eight years they had only increased by £877,000. In the course of the succeeding eight years there was an increase of £2,053,000, and this increase was largely due to the new law. But the law operated disadvantageously in places in the neighbourhood of which there was land on which new buildings enjoyed exemption from the tax for eighteen years. Those whose interests are affected by a tax on house property

do not consider it so burdensome when its application is delayed for several years, as they would if it were intended to take effect on houses as soon as they were built. Every house stands in need of repairs for some time after it has been built; and many people are reluctant to face the discomforts of occupying a newly built house, so that the owner has in many cases to make a sacrifice. The temporary exemption from the tax here came in as a palliative; it gave a stimulus to building which nothing can now give except a further rise in house rents.

It will be understood that these observations have no other object than to show the unfavourable side of a legislative change, of which it would be impossible to judge adequately without fuller investigation.

§ 6

How do Personal Taxes borne by Occupiers of Houses in their capacity of Occupiers affect House Rents ?

Taxes are levied not only in respect of the ownership, but also in respect of the use of buildings. We have examples in the "Rates" which are levied in England, and which, so far as houses are concerned, are calculated on the sole basis of the rents, and in the Dutch "Personal" tax, the basis for calculating which includes various other factors besides house rent. The fact that such taxes are paid by the occupier, and therefore have the same effect as an addition to the rent charged for the house, is a reason for allowing that they exercise an influence upon the rents which houses will fetch. No one denies that the excise duty on sugar to a certain extent influences the prices obtained by sugar manufacturers. What difference is there between the duty on sugar and the tax which we are now considering, as regards the manner in which they both affect prices? There is a difference in respect to the manner in which the two taxes are levied; but if a duty on sugar, instead of being shifted by the refiner on to the merchant and by the merchant on to the consumer, were to be paid direct into the Exchequer by the latter, it would in no way alter our opinion as to the effect of the

sugar duty. We should then, just as we do now, hold the opinion that the duty in some measure moderates the demand for sugar, and that, as a result, the producer has to accept lower prices than he would otherwise be able to obtain. The consumer would be still more alive to the fact that he has to make a twofold payment, and just as he does now, so would he then, make a mental comparison between that twofold payment and the amount of enjoyment which the use of the article was capable of yielding him. Whenever the result of the comparison was unfavourable, he would offer the producer a lower price—since no abatement can be made on the demands of the Exchequer—and if he could not obtain the article for the price which he offered, he would abstain from using, or would purchase a smaller quantity of it.

It is in the manner here assumed that the use of buildings is taxed in England and Holland. The whole of the tax is paid directly by the occupier or user; the twofold price which the occupation or use of a house costs him, is paid by him in two parts: to the owner he pays rent, and to the revenue-collector rates or taxes. But the manner in which the tax operates is no more affected by this than it was in the case which we have just assumed. The occupier adds the two items together. He knows quite well that if at any time he chose to be satisfied with a smaller house, he would effect a twofold saving; not only would he have less rent, but also lower rates and taxes to pay. The fact that these rates and taxes are not included in the sum which he has to pay as rent, but are paid separately by himself, constitutes a further reason for admitting that they operate in the same way as an excise duty. This, in our opinion, does not weaken, but rather strengthens their operation.

It would be a mistake to regard the fact that a well-to-do man will not leave a house which he likes, merely in order to avoid having to pay a pound or two more in the way of taxes, as a refutation of this argument. We answered an objection similar to this when speaking of the connection between the rents charged for houses and the demand for dwelling accommodation. In doing so we showed what great diversity in means, tastes, and requirements may be found among people occupying houses of the same yearly rental. Here again we

may answer, that if the objection were valid, no import duty or excise duty would ever lower the price in bond of the article on which it was levied. There are always consumers with whom the taxation of an article does not count as a reason for using it more sparingly; there will always be people who would, if required, pay much more than they actually have to pay for things offered to them. That they are not called upon to do so, is due to the plentiful supply of the article and to the competing buyers placing either a higher value upon the sacrifice entailed, or a lower value upon the enjoyment conferred, by the purchase of the article. In this way they enjoy an advantage which Professor MARSHALL¹ calls consumer's surplus or consumer's rent. When we investigate the manner in which an excise or other duty operates, we must leave out of consideration those persons who enjoy this "surplus," since it is not by their demand that the prices are regulated. But this is a point which we have already explained and upon which we need not dwell any further.

It now only remains to point out that the truth of the theory stated above is confirmed by the experience of persons who let workmen's dwellings in towns situated in close proximity to each other, but differing as regards the rules in force concerning the personal tax. Among the various classes of towns distinguished in the law² concerning the so-called personal tax, Amsterdam ranks in the first, while the village Nieuwer-Amstel, situated on the confines of Amsterdam, ranks in the fifth. The result is, that in Amsterdam a house of a weekly rent of 4s. 2d. enjoys exemption from the tax on one-third of the rent, while in Nieuwer-Amstel such a house is taxed on the full rent, and that in the former place a weekly rent of 3s. 4d. is altogether exempt, while in the latter it is taxed on the full amount. The annual reports of a Building Society of Amsterdam³ show how seriously this affected their operations in respect to the letting of certain dwellings which they had built upon land lying close to the

¹ *Principles of Economics* (fourth edition), Part I. pp. 199-208.

² This refers to the law in operation when the above was written. It has since been amended.—A. A. W.

³ *Verslagen der te Amsterdam gevestigde Woning-Maatschappij*. See Report of March 5th, 1894.

metropolis but coming within the district of Nieuwer-Amstel. The Society had to accept low rents for these houses.

How far do the effects produced by the introduction of taxes of this kind extend? Are the effects temporary, or are they permanent? Do the rents obtainable for houses fall by a sum equal to the whole, or by a sum equal to a part only of the tax? We shall endeavour to answer each of these questions separately, as before, for each of our four groups of localities beginning with the first group, that is to say, with places in which there is plenty of building land on all sides. We shall assume that the tax which has been introduced amounts to 25 per cent. of the house rent, and that it is not intended to replace some other tax, but that the whole of it is to constitute an addition to State or local revenues. If it replaces another tax, the effect produced is twofold, since no general tax is without effect upon house rents. We will return to this later on.

In localities of the first group, the net rent derivable from every newly built house must, as we have seen, be such as to constitute a normal rate of interest, and, owing to the growth of the population, more houses are constantly being required. These are sufficient grounds for concluding that, in so far as the tax exercised any influence upon house rents in such localities, the influence would be of a temporary character. Things would probably come about in the following manner. At first rents would fall and building enterprise would slacken in consequence. But gradually the growth of population would restore rents to their former level, and building operations would again be engaged in, but not upon the same scale as before. For the flow of people to these localities would diminish owing to the increase in the cost of dwelling accommodation, so that their population would increase less rapidly than before, unless the new-comers—or some of these and some of the people already settled in the place—were to content themselves with smaller dwellings, in which case the influx of population would not diminish. Under the operation of causes which increase the cost of dwelling accommodation, people sometimes, as we know, grow less exacting in their requirements in the matter of dwelling accommodation.

In localities of the second group, where building yields no

advantage, owing to there being little demand for dwelling accommodation, there will be still less demand after the tax has been introduced. The number of persons desirous of occupying houses in those localities will, perhaps, not diminish; in fact, their number is not likely to diminish if the percentage rate of the tax be uniform all over the country. But they will offer lower rents, and there is no reason for doubting that their offers will be lower by just so much as is necessary to leave the cost of dwelling accommodation unchanged. Previously there had been equilibrium between demand and supply; this equilibrium was destroyed by the 25 per cent. tax. Consequently the rents charged for houses must be reduced to four-fifths of their former amounts in order to restore the equilibrium. Rents charged for houses have this in common with prices charged for goods, that their amounts are determined not alone by the number of persons competing as purchasers, but by the amounts which those people are prepared to pay. If, owing to some general catastrophe, all incomes in a town were to be reduced by half, there would not necessarily be any decrease in the number of persons requiring house room in the town, but most of those persons would offer lower rents. The same result may be expected to follow from the tax.

For reasons similar to those here stated, the tax will, in like manner, be shifted on to the house owners in towns of the fourth group, where no opportunities are afforded for building. In a former section we likened to towns of this kind certain neighbourhoods in large cities, such as the part of London known as "The City." The amazingly high rents which are paid in that part of London and which make building land there particularly valuable (yearly rents of thirty shillings to two pounds per square foot are not uncommon)¹ would be even higher if no rates had to be paid. In this case, too, we think we are justified in saying that the tax has the effect of lowering house rents by the full amount of the sum which it represents. For, the sums offered in the form of rent and rates combined show us what sacrifices people are prepared to make for the use of offices, shops, and similar premises in the City, and at what figure equilibrium is there

¹ W. H. DAWSON, *The Unearned Increment* (London, 1890), p. 6.

brought about between supply and demand. Were the rates to be abolished, owners would be able to get higher rents—in so far, that is, as the rates were borne by the occupiers and not by the owners—and they would be able to get just so much more rent as the occupiers now pay in the shape of rates.

But what would be the effect of the tax in towns of the third group? Two houses are situated in different neighbourhoods, and for that reason alone yield different rents. One of them, situated in a fashionable neighbourhood, fetches £200 per annum; the other, situated at the point where no ground rent is charged, fetches £60 per annum. The difference between the two amounts is £140. After the tax has been introduced, £250 per annum will have to be paid for the use of the first and £75 per annum for the use of the second of these houses, and the difference between the rents will amount to £175. It is obvious that an anomaly has now arisen which must in some way be got rid of; and as we cannot conceive of its being removed by a rise in the rent of the cheaper house, the only way in which its removal is possible is by a fall in the rent of the dearer house. Furthermore, when the rents stood at £200 and £60 respectively, there was equilibrium between supply and demand in respect to both of these kinds of houses; now that £250 and £75 respectively have to be paid for the use of the houses, including the tax, this equilibrium must be destroyed. It may be assumed that, before long, these amounts will have fallen to £200 and £60 respectively; in other words, that the rent of the dearer house will drop to £160 and that of the cheaper house to £48. This will in each case represent a fall equal to the full amount of the tax.

There would be nothing to add to this if our illustration had reference to a town in which the population was no longer increasing; the tax would again fall entirely upon the house owners. Not immediately, since a number of leases would have to expire, and some resistance on the part of the landlords would have to be overcome before things adapted themselves to the new order; but in the end they would so adapt themselves, if in the meantime no change had occurred in the scale of the demand for houses, that

is to say, if £200 and £60 still expressed the "marginal utility" of the two classes of houses respectively. What has been said had reference to houses of which the rents differed for no other reason than that the houses were situated in different neighbourhoods. But there is nothing to prevent our applying it to all houses; for, in respect of all kinds of houses the tax would give rise to a condition of things which would no longer be stable; all house rents without distinction would drop to a level such that the sum paid in rent and taxes together would be the same as the sum previously paid in rent alone.

Things shape themselves differently when the population keeps on increasing. If a sufficient inducement for steadily increasing the supply of houses was provided previously by the fact that a rent of £60 per annum was to be had for a house situated at the "marginal point," a rent of £48 will now be too low for that purpose. Building operations will be suspended, the supply will no longer keep up with the constantly increasing demand, and houses which fell to £48 owing to the tax will, after a while, be letting once more for £60 a year. But the houses which originally fetched £200 will not go up beyond £172,¹ so long, that is, as the difference in value between the two houses arising out of their difference in situation remains exactly at £140 per annum. The introduction of the tax has, therefore, caused some house owners a permanent loss, viz., those owners whose house rents are partly composed of ground rent. This ground rent was formerly £140, now it has fallen to £112; a diminution of £28, or exactly 25 per cent. of the new sum. From this it follows that the tax, in so far as it is based on that portion of the rent which consists of ground rent, is borne by the owner of the house.

It will be seen that the conclusion is the same as that at which we arrived as a result of our inquiry into the effect of taxes on house property. And it was to be expected that it would be the same. What is ground rent? It is a gain which accrues to the owner of the ground. If the Exchequer appropriates a percentage of this by means of a special tax, the

¹ £60 + 25 per cent. = £75. The annual sum paid in rent and taxes for the dearer house, must, therefore, be £75 + £140, or £215; that is, £172 + 25 per cent.

owner will try in vain to indemnify himself. If the Exchequer takes a step further and also taxes the person who pays the sum constituting the owner's gain, in proportion to the sum so paid, the owner cannot expect this sum to remain what it was before; for if the Exchequer had told the occupier that in future he must himself pay the tax-collector a portion of the ground rent, this would be quite the same. But if the occupiers were to try to get relieved, at the owners' expense, of the payment of the tax on the other portion of the rent—that is, on the house rent strictly so called—they would find that the building of new houses would cease. If this fact caused them no inconvenience, they would succeed in getting relieved of this portion of the tax as well; but if the stoppage of the supply of new houses caused them inconvenience, they would have to resign themselves to the payment of this part of the tax, otherwise the supply of such houses would fall short of the demand.

The loss sustained in ground rent may even amount to somewhat more than we have here been assuming. We have already observed that, under the influence of causes which render dwelling accommodation dearer, people sometimes become less exacting in their choice of a house. As a result of this, things may shape themselves as follows. After the drop in house rents has caused a suspension of building operations, rents will go up once more; but before they have risen to such an extent that houses situated in neighbourhoods where land is still available will fetch the same rents as they did before the fall took place, a demand will arise for a smaller or less convenient type of house. This demand is satisfied, and the result is that a check is imposed on the further rise of rents; just as a lower limit is imposed on the rise in the price of an article which has become scarce, if a substitute for the article exists, and if there be a ready sale for that substitute. We cannot be quite sure, indeed, that things will happen in this way. Rents have increased remarkably in Berlin, and yet the census returns afford no evidence of any noteworthy decline in the housing conditions of the people. The proportion of the population of Berlin housed in dwellings of different sizes in 1867 and 1885 respectively was as follows:—

	1867, Per Cent.	1885, Per Cent.
In dwellings having no fireplace . . .	0·9	0·59
„ „ consisting of 1 room ¹ . . .	42·9	44·06
„ „ „ 2 rooms . . .	26·8	28·60
„ „ „ 3 „ . . .	12·8	11·57
„ „ „ 4 „ . . .	6·0	5·52
„ „ „ 5-7 „ . . .	7·4	7·14
„ „ „ 8 „ or more . . .	3·2	2·47

Nevertheless, things may take the course described above, and then the rents of the houses which were already built on the outer fringe of the town will not revert to the figure at which they stood before their fall, while in the better neighbourhoods rents will remain even further below their old level than would otherwise have been the case. A tax based upon the rents, and levied from the occupiers of houses, must react upon the ground rents to an extent *at least* as great as has been shown by our calculations, but it may react upon them to a still greater extent.

There are, however, two observations which we must not omit to make here. Our inquiry has been directed towards ascertaining the effect of a tax exclusively based upon, and strictly proportionate to, house rent. We know, however, from experience, that there may be other bases of assessment, the application of which requires close acquaintance with the law and with the rules for its administration; we also know that valuations of house rents may be seriously defective. For these and other reasons, the person who is being taxed may not always be in a position to reckon accurately in advance how much he will have to pay to the Exchequer; he may only be able to form a rough estimate. These and similar causes sometimes hamper, but they also occasionally facilitate, the operation of the economic laws which we are here endeavouring to trace. They cannot be compared to the disturbance which the resistance of the air causes in the operation of the natural laws relating to the movements of bodies, inasmuch as what we are now speaking of is not always disturbance. A person who does not know exactly how much

¹ An apartment having a fireplace is reckoned as a "room." Fuller details will be found in the *Statistisches Jahrbuch Deutscher Städte*, the first number of which was published in Breslau in 1890.

he will have to pay is liable to over-estimate the amount. If it be known that the manner of valuing house rents differs as between an old and a new part of a town, public opinion, which frequently bases its judgment on a few striking examples, may over-estimate the difference. Nevertheless, it must be admitted that a tax of the kind here referred to does not operate upon house rents with the mathematical precision of a well-made steam-engine, and, above all, that its operation requires time, often a long time, to manifest itself.

Further, we would recall what has been said once before, *viz.*, that such a tax may be introduced in order to replace another tax, and then the change exercises a double influence, one tending to depress and the other to raise house rents. Which of these influences will preponderate depends upon the nature and amount of the tax which has been abolished; thus it may happen that one class of house rents will rise and the other fall. For example, the abolition of a heavy excise duty on food stuffs, coupled with the introduction of a house tax, would have a favourable effect upon cheaper house rents, since the new tax would weigh much less heavily than the old one upon the working classes, though not upon the wealthier classes, so that the dearer rents would tend to fall. Such rents will also fall when the house tax replaces an income-tax. But even though many people experience no financial effect from the change, owing to the fact that the taxes for which they are liable have neither been lightened nor increased by it, the fact that the tax is now connected with dwelling accommodation, of which it was previously independent, will have an unfavourable effect upon house rents.

Up to the present we have been discussing the effects which follow the introduction of a tax upon the use of buildings. Let us briefly consider the nature of the effects which should be ascribed to partial exemption from such a tax.

In order to discover what the effect would be, we have only to ask ourselves, who would be the gainers if such an exemption were conceded to the whole of the inhabitants of a particular neighbourhood or street? It needs no proof that, in

the course of a few years, the rents paid for houses in the part of the town where this immunity was being enjoyed, would have risen by an amount equal to the whole of the tax, and that now it would be the owners and not the occupiers of the exempted houses who would reap benefit from the measure. The conclusion is the same if we inquire into the effect of an exemption determined, not by the situation of the houses, but by the purpose for which they are to be used. If, for example, the exemption were to apply to shops, the rents obtainable for this class of premises would rise after a while, and the amount by which they rose would correspond exactly to the amount of the tax from which they had been exempted.

If any one should doubt this, let him just consider how keenly shopkeepers compete not only among themselves, but also with outsiders, in order to acquire buildings or portions of buildings considered to be suitable for carrying on their business. There are very many streets where, as regards the lower parts of the houses, nothing has been able to withstand this competition, and where the whole of the population lives upstairs. This condition of things exists in places where shop-premises are taxed, although the tax must certainly act as a check. What then would happen if this check were removed? The competition for every eligible space would become even keener than it is at present. Rent is not all that a shopkeeper has to pay for the use of the premises in which he carries on his business; the Exchequer also makes claims upon him. To exempt the shopkeepers from these claims, while maintaining them in respect to the community in general, could have no other effect than to increase the rents of shops.

Against this it might be urged that the gain arising from the exemption need not necessarily be absorbed by increase in rent, but may disappear in some other way. Might not the exemption result in the starting of more shops, and might not these shops attract customers by selling at lower prices? In that case the measure would have the effect of benefiting many, at any rate it would cause a general reduction in the prices of goods sold in shops. To this we would answer that in many neighbourhoods there is no more room

for new shops. There are other neighbourhoods, it is true, where many more shops might be built; but they are not the kind of localities which shopkeepers would regard as eligible for their purpose, and exemption from taxation would go a very little way towards inducing a person to open a shop in a locality which he would not otherwise have chosen for that purpose. Moreover, in those parts of a town where shops are scarce, the classes of goods sold are usually limited to articles of everyday use. It is probable, too, that owners of premises would use the exemption from the tax as an excuse for asking higher rents as soon as the expiration of existing leases afforded them a chance of doing so, and it would be difficult to show any reason why they should not succeed in their aim.

It might also be urged that many shopkeepers are the owners of the premises in which they carry on their business. In that case, surely, the exemption brings them an advantage of which nothing can ever deprive them! Undoubtedly; but it is in their capacity of owners, and not of shopkeepers, that they gain this advantage, nor would any one to whom they or their heirs might sell the premises enjoy the same advantage, since the selling prices would then be higher by an amount equal to the capitalised sum of the tax. Partial exemptions cause the rents obtainable for the houses to which they apply to go up, and therefore, in the long-run, benefit the owners only, and not the occupiers. If any ground rent enters into the composition of the house rent—and where the tax represents a large sum this will in most cases be so—then that ground rent will be increased. This increase would manifest itself in the higher price which the site would fetch supposing that it were to become vacant in consequence of the house being pulled down.

§ 7

Measures for the Improvement of Housing Conditions

What has our inquiry taught us as regards measures for the improvement of housing conditions? We cannot bring the present chapter to a close without answering this question. The

unsatisfactory manner in which the people are housed, especially in large cities, is claiming increased attention from day to day. From the figures given in the first section of the present chapter it appeared that, in 1883, quite one-half of the dwellings in Amsterdam were such that their rents could not be assessed for the tax at more than about 3s. 4d. per week, and it appears from the Table on p. 164 that some 44 per cent. of the people of Berlin were housed in dwellings possessing only one room provided with a fireplace. There would be no difficulty in adducing much more evidence of an equally depressing nature.¹ Favourable exceptions to the rule are not wanting, it is true; but, on the whole, the working classes in large towns are housed in a way which cannot but be regarded as most inadequate for a large proportion of workmen's families. The evils which follow from such conditions are various. Overcrowded dwellings breed immorality, unclean and insanitary houses are centres for the spread of infectious diseases. The "housing question" is rightly regarded nowadays as an important part of the social question, and earnest endeavours are being made to solve it. But how is it to be solved, and what is the chief cause of the disease which we desire to cure?

According to some—and their opinion is very widely held—the sole reason why workmen's families are badly housed is, that good houses are dear. We always find that well-to-do people live in commodious and healthy dwellings, and the first thing a man does when he obtains a considerable increase of income and sets about spending it, generally is to look out for a better house. Nothing affords a better indication of a family's means than the kind of house in which they live. There appears, therefore, to be every reason for assuming that the housing question is a money question. From this it would

¹ There is a most copious literature on this subject. Amongst the most noteworthy works of recent times are the following: *Die Wohnungsnoth der ärmeren Klassen in deutschen Grossstädten und Vorschläge zu deren Abhülfe; Gutachten und Berichte herausgegeben im Auftrage des Vereins für Sozialpolitik*, Leipzig, 1886. M. T. REYNOLDS, *The Housing of the Poor in American Cities* (vol. viii. of the *Publications of the American Economic Association*). Dr. J. BERTILLON, *Essai de statistique comparée du surpeuplement des habitations à Paris et dans les grandes capitales européennes*, Paris, 1895. Dr. J. LEHR, under *Wohnungsfrage* in the *Handwörterbuch der Staatswissenschaften*, Part VI. pp. 727-753.

follow that there are two ways in which its solution should be attempted, viz., increasing incomes or reducing the rents of good dwellings. No single measure would suffice to effect the first of these objects, but the second might be attained by a single measure. There is nothing to prevent the State or other public authorities from encouraging the erection of good and cheap dwellings, even though it should be necessary to devote public money to the purpose; there is good reason, apparently, to think that workpeople, who would then be in a position to choose between good and bad dwellings, would select the former.

We cannot agree with these opinions. The housing question is not so much a question of means as a question of standard of living. A respectable and tidy working-class family may be compelled to take a defective dwelling, but after a while the whole aspect of the place will have changed; nothing unsightly will meet our gaze when we enter it. On the other hand, let a rough and untidy family occupy the very best dwelling, and before long the place will have lost much of its attractiveness. Moreover, the best dwelling will deteriorate through being overcrowded. In his *Essai de statistique comparée du surpeuplement des habitations*, BERTILLON gives a chart showing the percentage of overcrowded dwellings in the different *arrondissements* of Paris. His figures relate to the years 1886-1890; we give them below in conjunction with figures showing the mean birth-rate in 1888, and taken from the *Annuaire statistique de la ville de Paris* for that year:—

<i>Arrondissements.</i>	Percentage of Overcrowded Dwellings (1886-90).	Mean Birth-rate per 10,000 Inhabitants in the Groups of <i>Arron- dissements</i> (1888).
VIII, IX	12·7 to 15·4	147 to 200·7
I, II	15·5 „ 18·1	188·9 „ 236·3
III, VI, VII, X, XVI, XVII.	18·2 „ 20·8	197·4 „ 263·7
IV, V.	20·9 „ 23·5	240·6 „ 247·9
XI, XII, XVIII.	23·6 „ 26·2	277·1 „ 297·7
XV, XIX	26·3 „ 28·9	281·3 „ 311·5
XII, XIV, XX	29·0 „ 32·0	288·9 „ 323·1

We do not mean it to be deduced from the above table that the high birth-rate figures, by themselves, account for the overcrowding; families in which large numbers of children are

born are not always the largest. But a high birth-rate, as we know, indicates a low standard of living, and, regarded in this light, the table is a very interesting one.

But those whose arguments we are now disputing overlook other matters as well. Good dwellings are dear, they say. Our answer is, that they are only dear in places where earnings are comparatively high. The high prices charged for dwellings in such localities are due to the opportunities afforded there for earning larger sums than elsewhere: it is with a view to taking advantage of these opportunities that large numbers have flocked thither. Adequate means of subsistence are no longer to be found for the increasing population in the country or in small towns. A part of the people make their way to those places where, owing to a combination of favourable causes, the demand for labour has increased and the standard of wages gone up. Presently the places begin to teem with people, and a "housing question" in the real sense of the expression arises. Will it be possible to solve it by supplying better and larger houses at lower prices? We will suppose the most favourable case conceivable, viz., that such a number of good dwellings are built and offered at such low rents that in a short time all those who were badly housed before have settled in them. What will the owners of the houses which these people have left then do? Rather than allow their houses to stand empty they will offer them at low rents. This may not prove an inducement to the old tenants to return, but it will certainly attract people from neighbouring towns, and nothing will have been gained. Before long the same difficulty will again have arisen, and if it be solved in the same way it will shortly reappear once more. In fact, things will have become worse, since the number of persons seeking employment in the local labour market will have increased.

So long as the standard of living remains low, and population continues to increase rapidly, no improvement of housing conditions can be expected to result from such measures as those here suggested. But if the standard of living were raised, and the rate of increase of population were to slacken considerably, measures of this kind would no longer be necessary, and the housing question would solve itself. For its fundamental causes are these: in some grades of society, people are content

with a class of dwelling accommodation at which those of a higher social scale would simply shudder. They marry and settle down in a mean lodging, fully aware that the lodging will be still more cramped as soon as children begin to arrive. The excessive birth-rate aggravates the evil, and child mortality does not in all cases prove a sufficient corrective for it. The one misery palliates the other, no doubt, but the result in the end is distressing.

Here, for the first time, but not for the last, the question of the standard of living presents itself to us as the real root of a problem. If we shut our eyes to it when it is so, we are apt to adopt wrong or inadequate means for overcoming the difficulties which confront us, and may even aggravate the trouble. But in no single problem is it more evident than in this, that the conditions which it is sought to improve have been brought about by a low standard of living, coupled with a too rapid growth of population. And yet this fact is but seldom admitted and proclaimed. Can we wonder then that the reading of literature dealing with the question of the housing of the people so frequently leaves an unsatisfactory impression upon us? Any one who can discern the causes of the evil will at once perceive the only course to be adopted in order to combat it vigorously. That course consists in the State or other public authority either compulsorily buying up or condemning such house properties as may for any reason be unfit or unsuitable for habitation; furthermore, in the framing of stringent rules for the construction of new dwellings; and, in so far as it may be possible, in the fixing of a limit to the number of persons whom it shall be lawful to house in a given cubic space.

Does this imply that the authorities should at the same time provide good dwellings, so that those who have been deprived of the possibility of living in one place may be able to find house room elsewhere at a rent corresponding to their means? This practical question may be left to be determined according to local circumstances. In 1866 the Municipality of Glasgow acquired the ownership of some 86½ acres of ground in the heart of the city; they pulled down the large numbers of houses that stood upon it, laid out new streets, sold the building sites to the highest bidders, and

left the erection of dwellings to private enterprise, at any rate at first.¹ Other systems have been put in practice elsewhere. Reference has already been made (p. 139) to the action of the Metropolitan Board of Works in London in 1879. Those who purchased the ground (some 42 acres) from the Board had to undertake to erect workmen's dwellings upon it. Yet another plan was put in operation in Amsterdam some years back. In 1874 it appeared, from a report issued by the Sanitary Commission, that the condition of inhabited cellar dwellings was most unsatisfactory.² It was found that 20,644 persons, or 7·48 per cent. of the population, were living in such dwellings. The cellars numbered 4,985, and of these 1,315 were unfit for habitation owing to excessive damp, and 2,335 owing to other reasons. Compulsory buying-out of the owners was out of the question in this case, as in most of the houses the cellars alone were defective. The only course possible was to condemn them as unfit for habitation. In order to prepare the way for adopting this course the Municipality promoted the formation of a limited company, to whom they agreed to grant loans to the amount of £150,000 at 4½ per cent. per annum (since reduced to 3½ per cent.), such loans to be granted as they were needed. The Company was to be furnished with land free of charge, but had to apply the whole of its profits to the repayment of the loans, and after these had been paid off to make over the land and all the houses that had been built on it to the Municipality. The shareholders of the company had to subscribe for the formation of a capital to serve as a security for its liabilities, and to remain invested in 2½ per cent. stocks of the National Debt.

No difficulties arose in the carrying out of this scheme. It entailed no sacrifice on the Municipality beyond supplying

¹ After the failure of the City of Glasgow Bank (1878), when it became difficult to dispose of any more of the vacant sites, the Municipality themselves erected a number of buildings, viz., seven model lodging-houses, in which lodgings were provided at 3*d.* to 4½*d.* per night, and three blocks of dwellings consisting of eight three-roomed, fifty-eight two-roomed, and sixty single-roomed dwellings. The lodging-houses cost £86,000, and the dwellings £100,000. Information upon the whole matter will be found in M. T. REYNOLDS' *The Housing of the Poor*, etc., p. 47. See also the essay by W. SMART, entitled "The Municipal Work and Finance of Glasgow," in the *Economic Journal* of 1895, pp. 40-42.

² *Gemeentebled van Amsterdam* (1874), Part I. Supplement No. 8.

the land free of charge, nor upon the shareholders of the company beyond making themselves responsible for the capital invested in Government stock. This cost them nothing, as the interest on the stock was paid in full the whole time. It was an instance of co-operation between philanthropic capitalists and the Town Administration, entailing upon the former a certain risk without any prospect of gain, and upon the latter the loss of a certain amount of interest, with the prospect, however, of being amply recompensed for the loss later on.

It would be upon doctrinaire grounds alone that any one could absolutely condemn such a scheme as this, or in fact any action taken by public authorities with the object of providing for a want which they themselves had created by their measures in regard to insanitary house property. But will such action on the part of public authorities be necessary in most cases? Its object would be to prevent scarcity of dwellings or increase of house rents; but what reasons are there for expecting either of these eventualities? We rely upon the law of supply and demand for providing all necessaries, with a few exceptions. Why should we not be able to rely upon the same law in the matter of dwelling accommodation, an investment which capitalists do not shun, if we may judge by the number of houses that are constantly being built wherever any advantage is to be got from building? If only the occupiers of the condemned dwellings receive timely notice, builders will see to it that new buildings are ready for them by the time they are wanted. But it may be said that there is not always suitable land available for buildings. There is seldom any lack of such land on the outskirts of a town, and the overcrowded condition of the centre makes it desirable that houses should be built on the outskirts. The local authority might, if necessary, exercise some liberality in laying out the streets so as to induce many to settle there whose business did not oblige them to look out for a dwelling in the central parts of the town, where room would thus be made for others. What was done in Amsterdam was quite harmless; but when, after many years, we consider the matter, we have reason to ask ourselves whether it was necessary, and whether the same end could not have been

attained equally well by simply condemning the insanitary dwellings.

Still, the circumstances may be such as to leave it uncertain that the demand for dwellings will be met by activity on the part of builders, and then recourse to such a scheme as the one just described is justifiable. Schemes, whereby the State or Municipality lends money at a low rate of interest to Societies of good standing for the building of workmen's dwellings, are not to be condemned unconditionally; they are only to be condemned when unaccompanied by the introduction of stringent regulations as to bad and overcrowded dwellings.

What has just been said as regards the State or Municipality may also serve for guidance as to the course to be pursued in private schemes for improving the housing conditions of the working classes. Within the last forty or fifty years Societies have been organised in various places with the object of building good and cheap dwellings. Perhaps the most useful work done by these Societies has been to make people better acquainted with the requirements of workmen's dwellings. The dwellings built by these Societies have served as models for private builders, and taught many workpeople the value of a comfortable lodging.¹ The careful supervision exercised by the Societies' officers has also been beneficial, more especially when carried out by persons of tact and refinement, who were able to utilise their house-to-house visits as opportunities for promoting the moral welfare of the occupants. But if philanthropists are to achieve the fullest measure of success possible for them in the field of work now under consideration, they must not confine themselves to the building of workmen's dwellings; they must see that these are *substituted* for insanitary dwellings. The governing boards of such Societies as we have been referring to must use their influence towards procuring the removal of an insanitary house for every good house which they have built. They might also try to collect the capital needed to buy up and repair houses which, while not bad enough to be condemned as unfit for habitation, leave much to be desired. If we want to conquer the evil of bad housing conditions,

¹ Miss OCTAVIA HILL's *Labours in London* must recur to every one's mind in this connection.

we must do so by direct means. This fact has not been sufficiently kept in view, and hence it is that, notwithstanding all that has been done with the object of improving those conditions, so little progress has been made in that direction.

It ought to be our object to render defective dwelling accommodation no longer obtainable. It is likely enough that, if this ideal were attained, there would no longer be any rents so low as those which many families now pay for their housing accommodation; but this would not be altogether a bad thing. The result would be that workmen would marry later in life than they do at present, their families would be smaller, in fact their standard of living would be raised. As we inquire more deeply into the causes of pauperism, we shall find further reason to be convinced that the low standard of morality and civilisation lies at the root not only of the housing question, but of all social questions in general.

CHAPTER IV

INTEREST ON CAPITAL

§ 1

Property, Capital, and Stock for Consumption

FREQUENT allusion was made in the last chapter to interest on capital. We must now make a careful examination of this important form of income, and in order to do so we must first of all see what is meant by capital.

This word, as used in everyday language, includes property of all kinds, private as well as public. An entry in one of the Books of the National Debt confers upon the person to whom it relates the right to draw a certain sum every half-year from the moneys paid by tax-payers into the State Treasury. As this right is secured beyond all reasonable doubt by the credit of the State, the certificate of such an entry possesses a market value, and in everyday parlance is called capital. We have only to reflect a little, however, in order to see that "capital" of this sort differs entirely in character from a tool or from the trading stock of a shopkeeper. If the Dutch Government were to suspend payment, a loss would be suffered by the holders of the stock, but not by the people of Holland, for their taxes would be lessened by exactly the amount now required for the payment of the interest on the National Debt. On the contrary, when a factory or a closely packed warehouse is burnt down, mankind suffers a real loss, even though the owner of the establishment may have been fully indemnified by an insurance company. An occurrence of this sort does

not cause one person an injury to the advantage of others, it does not merely nullify a legal right, or a claim to be paid a certain income at fixed intervals,—it destroys a product of human labour. We would point out that only the last-named kind of property is capital in the scientific sense, and in doing so we greatly limit the sense in which the word is generally used.

A second and scarcely less important limitation is, that we exclude land. Land and capital appear to be nearly related, inasmuch as both yield an income. But the laws governing the income yielded by land differ from those which govern interest on capital, and this of itself, apart from other reasons, is a sufficient ground for treating land and capital as distinct things. This does not apply in the case of income derived from house property, as we have already seen. The actual house rent, that is to say, the house rent as distinct from any ground rent that may enter into its composition, depends to a great extent upon the rate of interest on capital.

In one respect, however, we must adhere to terms used in everyday language. Some writers regard intelligence and skill as capital, “immaterial” capital. Their object in doing this is to combat the notion that mankind would suffer a loss if many persons were to devote part of their possessions to the acquisition of useful knowledge. But there is no need for employing inaccurate terms in order to combat this error. The income derived from capital is interest, that derived from labour is wages. How can anything but confusion of ideas result from applying the word capital to the intellectual requisites for superior kinds of labour? The word capital should only be applied to material products.

The first of these limitations is the most important, inasmuch as it points to the necessity of making a distinction which should not be overlooked. If all the items of property which consist of claims and nothing else were to be added up, we should find that they amount to a very large sum, but in many cases the capital, out of the transfer of which the claims arose, has long since been used up. If, from the hundreds of millions of money representing National and Municipal indebtedness, we deduct the value of State and Municipal

property, a considerable sum still remains, and this sum is secured by no assets of any kind. The bonds which represent it are regarded by their owners as part of their property, and rightly so; but it is impossible for mankind as a whole to reckon them as property. By accurately defining capital we are enabled to see that mankind is poorer than it appears to be, and we shall presently see that this is the only way in which we can arrive at correct views concerning the creation of capital. Certain causes give rise to the existence of property, but not of capital; nevertheless, they are regarded as causes of the accumulation of capital.

But is our definition complete? If so, then every material product might be called capital, which, however, is not the case. We have to distinguish between capital and stock for consumption; by the latter we mean those goods which the individual intends for his own consumption or enjoyment, or for that of his family. If society were organised on a communistic basis, stock for consumption would include everything that was not an instrument of production, such as a machine, for example, and the word capital would only be applicable to instruments of production. As it is, however, the word capital is used in a wider sense, for a distinction is made between goods which mankind, as a whole, destines for its consumption, and those set apart by the individual for a similar purpose. The shopkeeper is fully alive to the importance of this distinction in respect to the goods which he has in stock, and to the danger he would incur if he neglected to observe it. All material products are either capital or stock for consumption, and all such goods may belong to either of these groups in turn. An article may be converted from capital into stock for consumption, and again from stock for consumption into capital. This contention—which we shall presently explain fully—will be more readily accepted when it has been observed that the expression stock for consumption, as used scientifically, also includes things which are intended to be exchanged for such stock. Nor does it matter, from an economic point of view, whether it be the things themselves or the things for which they are exchanged that are destined for consumption; in either case a certain value will be destroyed. It will be seen, therefore, that stock for

consumption may also consist of money, as it does in the case of the weekly wages which a labourer has received from his employer and which he intends to spend. These wages were capital while they remained in the possession of the employer, and after a few days have elapsed they may once more be capital in the hands of the shopkeepers and others to whom they have been paid by the labourer. Money is constantly changing its status, constantly passing out of the one group into the other.

Opinions differ respecting the group to which dwelling-houses and similar things belong, which owe their existence to capital and are capable of yielding an interest when let. German authors frequently apply the term *Nutz-Kapitalien* to things of this kind, and in doing so they assign them a special place beside capital in the ordinary sense. There can be no objection to this classification. Although dwelling-houses, like most other things, become used up in the course of time, and although, like stock for consumption, they are neither directly nor indirectly used for production, nevertheless their durability confers upon them a special character which is well expressed by the German term. Still they cannot be ranked as capital, if we use that word in its strictest sense.

§ 2

Fixed and Circulating Capital

A distinction is also made between *fixed* and *circulating* capital. After what has just been said, it will be easy to show how this most important distinction is to be applied. We have seen that capital and stock for consumption are to be regarded as two groups, to each of which it is possible for goods to belong alternately. There are some goods, however, which do not readily get out of the capital group when once they have got into it; many of them remain capital until they are no longer fit to be used for the purpose to which they are usually applied. It is in this character that they are capable of rendering most service. What better service could be expected from an instrument of production, a machine, let us say,

than that of simplifying production, or procuring us things which would otherwise be quite beyond our reach? Capital of this kind is said to be *fixed*, and the word has been well chosen. The fixity does not lie in any material properties inherent to the goods, but in their status, to use this word in the sense in which it was used above. They remain in this status; the moment when they cease to belong to the capital group is the moment when they become unfit for their work or are no longer needed for it. Fixed capital may be converted into stock for consumption, but it then ceases to fulfil the purpose for which it was destined; the goods of which it consists will then have lost their best qualities and may even have become almost valueless.

Circulating capital, when examined from our present standpoint, is found to possess, almost wholly, attributes the reverse of those just described. The moment at which circulating capital becomes permanently converted into stock for consumption is not—as in the case of fixed capital—delayed until it has become almost useless; on the contrary, the conversion takes place at the very moment when the capital has acquired its utmost value. In this case the conversion is not more or less accidental; it was intended from the first. Corn, sugar, coffee, cotton are produced for no other purpose than that of ultimately forming a part of that stock; if there were no such thing as exchange, and if every individual or group of individuals were to produce what they themselves required and no more, then these goods would never be anything else but stock for consumption; at least they would never remain in the possession of any one for purposes of production. For things which belong to the category of fixed capital, the normal status is that of capital; it is the status for which they are best fitted in virtue of their natural qualities. As regards things which belong to the category of circulating capital, their normal status is either uncertain (as when they are capable of being used for different purposes), or they have no normal status (as is the case with money, which is only serviceable because it is continually changing hands; and which, in changing hands, is likely, though not certain, to change its status); or finally, when they do rank

as capital, they only do so temporarily, as is the case with all goods intended for consumption.

There is great difference, too, in the means which owners of fixed and circulating capital have to adopt respectively in order to preserve the value of their property. The owner of fixed capital effects this purpose in one of two ways. In the first place, he may adopt the method known as "writing off." Every manufacturer knows that, however careful he may be to provide for the maintenance of his buildings and machinery, a portion of their value is destroyed each year by wear and tear. He knows from experience how much per annum, on an average, this loss amounts to; he therefore regularly "writes off" from his fixed capital a certain sum; that is, he regards the profits yielded by his business as having been less by such a sum. As the amount which we consume does not, as a rule, exceed our income, it generally follows that when we assess our income at a lower figure, we consume less. Speaking generally, "writing off" may be said to consist in adding to capital a quantity of goods corresponding in value to the depreciation of the property in respect to which the writing off took place.

The second plan usually adopted by the owner of fixed capital in order to secure his property against depreciation consists in maintenance and repair. The effect is similar to that of the first plan. The maintenance and repairs must be paid for, unless they be undertaken by the owner himself; in other words, the capitalist has to set aside a certain portion of his income to pay the wages of labour expended for the advantage of his property. He must therefore refrain from the use of such a portion of his income. It follows then that *restriction of consumption* by an amount corresponding to the depreciation and cost of maintenance is the means of which the owner of fixed capital avails himself in order to preserve his property from the effects of wear and tear.

The owner of circulating capital pursues a totally different course, that is, in so far as such capital be not equally in need of maintenance. At a given moment he parts absolutely with his property; it is converted into stock for consumption and then ceases to be capital. What means must he adopt in order to avoid being a loser by this conversion? He must

demand an *equivalent*, and this equivalent must supply the place of the goods with which he has parted. What takes place, under ordinary circumstances, is this: a person has received a certain sum in the shape of interest, rent or wages, which he makes up his mind to spend. From that moment the sum forms part of his stock for consumption, according to the meaning which we have given to that expression. He exchanges the sum for a certain quantity of goods in the possession of a shopkeeper, and forming part of that shopkeeper's capital. The shopkeeper's capital is now reduced by the value of the goods, but increased by the value of what he has received from the purchaser in exchange for them. The shopkeeper now possesses *other goods* than he did before, but the *aggregate value* of his possessions is not less than it was; he has not become poorer; his capital remains undiminished.

The anxiety of capitalists to keep their wealth unimpaired greatly helps to restrict consumption, sufficiently to prevent the limits of production being overstepped even for a short time; or it may be said to stimulate production to the extent necessary to enable it to keep pace with consumption. We will explain this by an hypothesis. Suppose that all commercial supplies were placed under the supervision of Government officials, who had strict orders not to part with any of them except in exchange for goods of equal or greater value; furthermore, that all buildings and ships, all machinery and plant, all warehouses and stores, were inspected every year by the Government, and that the owners were obliged to prove that they had capitalised a quantity of goods during the year having a value at least equal to that which the buildings, ships, plant, etc., had lost through wear and tear during the same period. If all this were enjoined by law, and if such a law could be enforced, supplies would continue to be consumed and ships and machinery to be affected by wear and tear, but everything that was consumed or worn out would be replaced; production would at least be sure to keep pace with consumption. The distinction which every capitalist is accustomed to make between his capital and his income, between what he must not and what he may consume in the year without becoming poorer, renders such a law as we have

assumed unnecessary in the great majority of cases. The duties which, in our hypothesis, we assigned to the Government officials are discharged voluntarily by the capitalist, the only difference being that the return made for goods supplied is not always immediate, but in many cases deferred, owing to the credit system. Every *entrepreneur* expects to get at least an equivalent for the things which he supplies to others. It is only by means of production that this expectation can be realised. Thus production is carried on to an extent at least sufficient to enable it to keep pace with consumption; and if this cannot be done, consumption must adapt itself to the limits of production.

But this arrangement, however admirably it may work on the whole, does not always work satisfactorily in particular cases. There is one case in which it does not work at all, and that is when something is offered to the capitalist, possessing all the attributes of capital for him as an individual, but not for mankind in general, for which therefore he is willing to exchange his capital. We are referring now to the case—only too frequent a one, unfortunately—where a Government contracts a loan to cover a deficit in its ordinary expenditure or to defray the cost of a war. In such a case capital is destroyed; for no equivalent is obtained to supply the place of the goods (soldiers' rations and outfit, war material, etc.) which have been converted into stock for consumption. But the capitalist himself does not perceive this. It causes him no concern that the bonds which he receives are only deeds conferring upon him a right to a share of the income of others, and that a certain amount of capital formerly owned by himself has been destroyed: the bonds may not be capital, but he can exchange them for capital any day. Here, then, we have a case where our arrangement works unsatisfactorily. Individual self-interest fails here to operate in the right direction. It fails to prevent the loss, in this way, of the fruits of years of thrift, and the consequent infliction upon mankind of an injury, the gravity of which cannot be properly estimated until we come to consider the causes which tend to produce a general fall of wages.

It is most important that we should clearly understand how it is that capital is destroyed in such a case as this.

It is sometimes asked, whether the raising of a Government loan to cover ordinary expenditure really causes capital to be lost, since the coins received by the Government remain in existence,—even remain in the country. This objection has no weight whatever. Let the goods paid for by the Government with the proceeds of the loan be called G, and the sum borrowed B. Before the Government acquired possession of the goods, there were *two* capitals, G and B. But the capitalists who possessed G, now own B; the former owners of B have nothing but bonds; therefore, the capital represented by G has been lost. All capital converted into stock for consumption is lost, if the person receiving it fails to give in return an equivalent obtained by means of production. A manufacturer pays wages to his operatives and takes those wages out of his capital. A Government pays its troops and takes the necessary money out of the proceeds of a loan which it has contracted. So far there is no difference. But observe the remaining circumstances. The manufacturer received an equivalent from the operatives, but the Government received no equivalent, in the economic sense, from its troops.

§ 3

The Creation of Capital

Let us now inquire into the way in which capital is created. In doing so we have to aim more especially at being able to distinguish between real and apparent creation of capital. Whenever a sum is withdrawn from capital and transferred to stock for consumption, an equal sum in the shape of new products should be refunded to capital by the person for whom that stock for consumption is intended. This does not always take place; sometimes capital gives, but receives nothing in return; in such cases a certain amount of capital is destroyed. But it sometimes happens, too, that capital receives new products without having to give anything in exchange for them; then we have an instance of the creation of capital. A very simple illustration may serve to explain this. When a shopkeeper takes some of his trading stock for his own use without putting into his till a sum

corresponding to the value of the stock withdrawn, we have an instance of capital being destroyed. But when he puts money, which has been obtained by means of labour, into his till, without taking its equivalent in goods for his own use, we have an instance of the creation of capital.

A labourer receives wages and spends a portion of them in the purchase of tools. A merchant realises a profit and puts it into his business. An agriculturist has a good corn-crop and employs a portion of the money which it brings him in increasing his live stock. A cotton-spinner prospers in his business, and takes advantage of his prosperity in order to enlarge his factory or to clear off a debt with which it is burdened. All these are instances of capital being created. We can employ our income in either of two ways; or, to express it otherwise, there are two ways in which we can employ the goods which we have produced or helped to produce, or the things which we have received in return for these services: we can either use them for our immediate enjoyment or we can convert them into interest-yielding property. If we adopt the latter course we create capital. The creation of capital consists in withholding products from stock for consumption. We might call this *saving* if the word did not to a certain extent convey the idea of practising *frugality*, of confining consumption within narrow limits. Capital does frequently originate in this way as a matter of fact. But in a large number of cases it originates in superfluity of means; then income exceeds consumption, not because the latter is small, but because the former is large. In so far, however, as "saving" is synonymous with "leaving unconsumed," capital may be said to be always and exclusively the result of saving.

There is nothing mysterious in all this, but the creation of capital is usually attended with certain circumstances to which there is a danger of attaching undue importance.

As the division of labour is very general, it seldom happens that the things of which a person's income is composed are also the goods in which he is most disposed to invest his capital. An agriculturist produces corn; but corn constitutes the capital of the corn-dealer, and to some extent that of the miller. A cotton-spinner produces yarn; but

yarn forms part of the capital of the weaver; the spinner tries to dispose of it as quickly as possible. A labourer receives his wages in money; but the persons for whose business the possession of money is most necessary are not to be found among the labouring class. A person who wishes to save a portion of his income will, as a rule, be desirous of exchanging the things of which that portion of his income consists for other things. The same applies—as we have already had occasion to show—to that part of his income which he intends to use as stock for consumption; these goods also, as a rule, are not of the kind needed by the person who produced them or received them as wages for the assistance he rendered in producing them. Whether the things of which an income is composed be intended for use as capital or as stock for consumption, they will in most cases be exchanged first of all for other things. But this exchange does not in any way affect the aggregate value of the objects with which capital is increased or stock for consumption replenished; it therefore alters nothing either in the conditions requisite for the creation of capital or in the manner in which capital is created; it only causes the economic status of certain objects to undergo a change. The corn which was capital becomes stock for consumption; the portion of his cotton yarn which the spinner exchanged for goods intended for his own consumption becomes capital once more in the hands of others.

This is the first of the points on which we desired that attention should be fixed. The second is allied to it.

Very many incomes are received in the shape of money or of paper conferring a claim to money. Others are received in the form of goods, but these goods are mostly sold for money. Owing to this we frequently—but not always, or even in most cases—find capital of recent creation taking the form of money, and this is, no doubt, one of the reasons why the word *saving* gives rise in many people's minds to the idea of accumulating money. We must, however, carefully distinguish between growth of capital and increase of the supply of money. Recently created capital may at first be permitted by its owner to take the shape of money, but we cannot be sure that it will retain that shape. On the contrary, if our capitalist has no need for a constant

keeping up of his supply of ready cash, it may be predicted that before long his capital will have assumed a totally different form. If he be a cattle-breeder, it will presently consist of cattle; if he be a manufacturer, it will not be long before it has been converted into machinery or raw materials. The total value of metallic money owned by Holland has been estimated at some £17,000,000. What a small part this is of the capital existing in Holland! Growth of capital *may* indeed be accompanied by increase in the supply of money; but whenever this is the case, it is generally due to the fact that the increased prosperity, which the newly created capital has helped to bring about, has caused sales and purchases to become more frequent, and thus given rise to a demand for more money.

In civilised countries, where people are not in the habit of burying their treasure, money plays a very insignificant part in the process of creating capital. In the creation of most of the capital, as well as in most of the sales and purchases effected in such countries, money performs no other service than that of a measurer of value. And in so far as it does more than this, in so far as new capital takes the shape of money, we may be quite sure that the coins employed in this way perform the same work several times over. This work may be compared to that of a locomotive at a shunting station. The same locomotive may be seen constantly passing and repassing on its way to move another set of carriages to their destination. Similarly, the very same coins may be brought to the savings bank, now by one person and again by another; for, as soon as the savings bank has received the coins, it exchanges them for other things, and so the money is speedily enabled to pass through the same process once more.

When growth of capital is coincident with a considerable development in banking, the supply of money actually decreases. An increase in the quantity of gold and silver, therefore, is not among the signs by which we are enabled to see whether the capital of a country is increasing or not. The signs are of another kind altogether. If we find that merchants and shopkeepers are becoming more and more disposed to give credit, that live stock is increasing, that

extensive schemes for improving the land are being carried out, that factories and other buildings are being erected, that the machines and implements used in industry and agriculture are getting more costly and more numerous, that railways are being built, that shipping enterprises are multiplying (if the nation under observation be a seafaring one), lastly, if we find that trade with foreign countries is becoming more and more independent of foreign help, that credit is being given where it was formerly sought—if all these things, or even a part of them, be found to be true of a country, we may conclude that the capital of that country is increasing.

It would be needless to enlarge further upon this topic, were it not that the doctrine here set forth as to the origin of capital has been emphatically denied, and that the ideas which have prompted its denial are adopted by many. We are now thinking of what FERDINAND LASSALLE has said concerning the creation of capital. In a controversial essay directed against SCHULZE-DELITZSCH, the father of German co-operation, LASSALLE endeavours to prove, among other propositions of a paradoxical nature, that capital is not always, or indeed more especially, created by producing more than is consumed or by consuming less than is produced. His contention is, that capital has its origin in *Conjuncture* more frequently than in anything else, and he shows by a number of examples what he means us to understand by this word, which he has borrowed from German commercial phraseology. I purchase a piece of land for £1,000, and in ten years its value has doubled owing to the increased demand for agricultural produce; I get £2,000 for it. Even though I may have consumed articles to the value of £200 in excess of my income for the ten years, I am, nevertheless, richer by £800 at the end of that time. Where has this new capital of £800 come from? It has not resulted from any industry or thrift on my part, but from the operation of various social causes—from *Conjuncture*.

Another example. A person takes shares for £1,000 in a railway which pays a good dividend, so that before long the stock is quoted in the market at 75 per cent. above par. If our capitalist now sells out he gets £1,750 for the £1,000 which he spent; another proof that capital does not originate

in thrift and labour, but in a concurrence of circumstance—in *Conjuncture*.¹

This reasoning has met with a certain amount of acceptance. According to some, it proves convincingly that the old theory of the creation of capital, if not requiring to be completely revised, should at least be considerably modified. We are unable, however, to see anything in LASSALLE'S argument but one of the many proofs of the feverish haste with which he wrote his book.² In the cases mentioned by him, no capital whatever is created; there is simply an alteration in the ratio of exchange between certain sorts of property, the property of certain individuals becomes exchangeable for a larger amount of capital.

The first of the cases referred to by LASSALLE reminds us of the illustration made use of by RICARDO in explaining the origin of rent. A people settles in a new country; it begins by cultivating land, which yields, say, thirty bushels of wheat to the acre. But the population increases, and before long, recourse has to be had to less fertile land, yielding twenty-five bushels to the acre. The thirty-bushel land now fetches a rent of five bushels, or, supposing wheat to be worth 2s. a bushel, a rent of 10s. per acre. But land capable of yielding rent has a market value, the amount of which depends upon the rate of interest. If that rate be 4 per cent., the market value in the present case will be $10s. \times \frac{100}{4} = £12:10s.$; if the rate of interest be 3 per cent., the market value will be one-third more, or $£16:13s. 4d.$ If the persons who own the best quality land now care to sell, they can get $£12:10s.$ or $£16:13s. 4d.$ per acre for it. But are we to conclude from this that new capital has been created? The sole conclusion to be drawn is, that prime land has become scarce, that the proportion in which the owners of such land share in the national income is now a much more favourable one for them than it was before, and that consequently their property has acquired a value in exchange which it did not possess before.

To what strange conclusions should we not be led if we

¹ Herr Bastiat-Schulze von Delitzsch, *der Oekonomische Julian, oder Kapital und Arbeit*, Berlin, 1864.

² Cf. LASSALLE'S OWN words in FRANZ MEHRING, *Die Deutsche Socialdemokratie*, third edition (Bremen, 1879), p. 52.

were to admit LASSALLE's contention! Surely, when we say that capital has been created, we imply that mankind has become richer. But in the case which has been assumed, we should have to admit that it would have been to the disadvantage of the population of the newly inhabited country if the second-quality land had produced twenty-seven or twenty-eight bushels to the acre instead of twenty-five; or if the rate of interest had been 12 or 15 per cent. instead of 3 or 4 per cent.!

It could be shown in the same way that no capital was created by the rise in the value of the railway shares. Why is it that a railway enterprise is sometimes worth more than the capital that has been invested in it? Is it the rails or waggons or locomotives that have increased in value? Not at all; but the owners of the railway have a virtual or a legal monopoly. The terms of the concession may provide that no other line shall be constructed in the neighbourhood; or there may be difficulty in getting the necessary powers for acquiring any more land in the vicinity; or it may be found that there would be no advantage in trying to do so, as the profits would be inadequate if shared by two companies. But does creation of capital take place when the right to carry on a particular kind of business, a business which can only be carried on by certain persons, is sold by those persons at a profit? If this were so, the State could create as much capital as it liked; in order to do so, it would only have to grant a number of monopolies! Suppose the State had reserved to itself the right to reduce the railway rates according to its discretion, and had exercised this right in such a manner as to prevent the shares from going up, no capital would then have been created according to LASSALLE. Neither would any have been created if the rate of interest had kept pace with the rise that took place in the railway dividends from the time that the shares stood at par, as this also would have kept the shares from going up! Thus we see how defective this theory of LASSALLE's is. If his views were correct, creation of capital would take place whenever the building land about a town became dearer owing to the population of the town increasing, or whenever wells became more valuable in consequence of a long drought. We avoid the danger of

falling into these and similar errors by steadfastly declining to believe that capital has been created unless we can convince ourselves that goods destined for the purpose of production have either increased in quantity or have acquired attributes which render them more useful.

§ 4

The Credit Market

As a first step towards acquiring a correct knowledge of the origin of interest, we now propose to examine capital regarded as the subject-matter of credit transactions. Interest, in the strict sense of the word, is the income obtained by advancing capital, and to advance capital is to give credit. But the act of giving credit is frequently performed in such a manner that its character, and above all its subject-matter, cannot be discerned without some effort.

The simplest and most usual way of advancing capital—if we except the letting of houses—consists in *selling on credit*. A merchant who sells cotton to a spinner and is satisfied with the promise of payment in three months, or a wholesale dealer who supplies goods on terms which allow payment to be deferred till the end of the year, furnishes the person purchasing on these terms with capital for a certain time. A credit sale is a transaction of a composite character; it is not an ordinary sale, but a sale involving a credit operation. And in this operation, interest is reckoned, the interest being concealed in the price. It may safely be said that the profits made by wholesale dealers consist almost entirely of interest on capital advanced, but they always have the appearance of differences in price.

If capital were never advanced in any other way, it would be impossible for any misconception ever to arise with reference to credit. It would be clear to every one that the *subject-matter* of credit was capital, consisting of goods of every conceivable kind, and it would never occur to any one to regard the giving of credit and the advancing of money as synonymous expressions. Nevertheless, it may assist the student not a little towards a correct knowledge of this subject to have

some prominence given to the fact that the form of credit which we have just been describing is the most common of all, and that most of the interest obtained by advancing capital is paid in the manner indicated. To convince ourselves of this, we have only to observe the way in which international trade is conducted. A merchant in London supplies goods to a merchant in Amsterdam, and draws a two-months bill on him for the amount. But does he draw the bill for a sum corresponding to the cash price of the goods and no more? Of course not. The amount for which he draws exceeds that price by a sum which represents the interest. And even though the London merchant should draw no bill, owing to the fact that he expects a remittance, he will still reckon the interest. In short, a number of credit operations are conducted every day both between persons residing in different countries and also between persons residing in the same country, which, owing to the fact that they are involved in transactions of purchase and sale, do not appear in the light of credit operations. Nevertheless they are credit operations, and in number they far exceed all other operations of this kind.

But this most simple and most usual way of advancing capital is not always feasible. Many goods are always sold for cash as a matter of trade custom, and many sellers are averse to giving credit, for fear they should lose their capital. In circumstances like these, it is conceivable, too, that the seller should have no immediate use for his capital, and that the buyer should not have the means to give an immediate equivalent for it. As we have seen, special reasons, namely, those just mentioned, stand in the way of an ordinary credit sale being effected. But in that case both of the parties have a common interest. For the capitalist, who is unable to employ his capital, it would be an advantage to be able to transfer it temporarily to another and to get interest for doing so; for the person who wants to buy the goods, but cannot pay for them at once, it would be an advantage to get possession of the goods, and he is prepared to pay interest for them, because he knows that the possession of the capital would be worth that interest to him. An intermediary is therefore required, who will bring these two persons together and

thus remove the obstacle which impedes the advance of capital being made.

We propose to make a close examination of the manner in which this difficulty is overcome; for, fundamentally, the solution is effected in precisely the same way as that of all other difficulties of the same kind. We shall also have to deal now, for the first time, with what is called the "money market." This market—a small branch of the credit market—must not be regarded as the place where all, or even most, of the capital which is temporarily available is advanced on credit; but rather as the place where those measures for governing the transfer of capital on credit are devised, which special circumstances sometimes render necessary.

And now as to the solution. The person who needs the capital applies to some one who possesses money, and he asks for a loan of this money, either on some kind of security, or on a simple note of hand. His request is granted and he pays cash for the goods. Thus he himself has been enabled to achieve the object he had in view; he has for his creditor a person other than he would have had if he had bought the goods on credit, but this is immaterial to him. The seller of the goods has still to be suited, however; he wanted to put out his capital at interest, and he could have effected his purpose by selling the goods on credit. He can still do so by offering to place out on loan the money which he has received for the goods; and if he adopts this course, the money recently withdrawn from the money market returns to that market within a few days, perhaps within a few hours. It may even happen that neither a coin nor a bank note has been used throughout the whole of the transactions. Suppose that both the buyer and the seller have accounts with the same deposit bank, that the former has applied to the bank for a loan, and that the bank has credited his current account with the sum which he required. In this way he is enabled to pay for the goods by means of an order on the bank, that is to say, a cheque. Should the seller of the goods pay this cheque into his own deposit account with the bank, the whole affair will thus have been disposed of by means of a few book entries, and things will really be in much the same condition as if the goods had been

sold on credit and the bank had guaranteed the capitalist against loss.

If we examine the balance-sheet of a deposit bank, we always find on one side a statement of what the bank owes to various persons who have entrusted it with the care of "money," as it is expressed; on the other side we find a statement of what is owing to the bank by other persons to whom it has lent "money." We may be quite sure that, in most cases, money has neither been received nor paid out, but that everything has been settled by means of book entries. A merchant has a quantity of cotton. He wants to sell it in order that he may secure the price, and he wants to sell it for cash in order that he may be secure against all risk; but for the moment he is not in immediate need of the equivalent of his goods. A spinner wants to lay in a stock of cotton, but is unable to pay cash for it. The bank now acts as intermediary. The merchant becomes a creditor, just as he would if he had sold on credit; but he becomes the creditor of the bank, not of the spinner. The latter becomes a debtor, just as he would if the cotton had been supplied to him on credit, but he becomes a debtor to the bank, not to the merchant.

The total amount held on deposit and current-account by English joint-stock banks is estimated at some £500,000,000 sterling, against which there stands another and not much smaller sum, consisting of advances to various persons. We may safely assume that a great part of both of these totals originated in operations of the kind just described. It is capital in various forms which, through the mediation of the banks, has passed out of the hands of those who possessed it into the hands of those who were in need of it; and in the process of transfer, money has performed no other function than that of a measurer of value.

It would cause endless confusion, but it would be useful as a means of putting an end to a number of misconceptions, if all persons now owing anything to the banks were obliged to pay their debts at once, on the understanding that the capital should be paid back in the form in which it happened to be at that very moment, and if all this capital were to be handed over in the same form to the people credited for any sum in the books of the banks. These creditors

would probably be greatly surprised. They would say to the banks, "We supplied you with money and you give us back cattle, agricultural produce, manufactured goods, and implements." But the banks might with perfect truth reply, "We never received any money whatever from you. You imported cotton, or grew wheat, or reared cattle; you transferred the cotton, or the wheat, or the cattle to other persons; you did this through our agency. We credited you on each occasion in our books with a sum of money corresponding to the value of the capital which you transferred. You are now getting back what you gave, that is to say, all kinds of goods."

We have now seen one of the difficulties which may arise in connection with the transfer of capital on credit, and we have seen how that difficulty is solved. The smaller the extent to which credit sales obtain in a particular branch of commerce, or the shorter the periods for which credit is given for those sales, the greater will this difficulty be. That is why the buying and selling of stocks and shares causes so much movement on the money market.

It is not customary to sell stocks and shares on credit. There is such a thing as a "time bargain," but the kind of sale to which this term applies is one in which the delivery of what has been sold is deferred until a stipulated day, not a sale involving deferred payment for what has already been delivered. Stock and share business is pre-eminently cash business. Consequently, the person who wants to buy stocks or shares, but has not the money wherewith to do so, always finds himself in circumstances like those in which occasionally the purchaser of goods finds himself. But it very often happens that the person who is selling stocks or shares does not require their equivalent at once. What happens then? Possibly the seller advances money to his own purchaser; or to some one else's, and his own purchaser borrows from a third party. In that case our man does not sell on credit, it is true, but he does what practically comes to the same thing. For he at once puts out at interest, it may be with the very speculator who gave it to him, the sum of money—if it be a sum of money and not some kind of document establishing his claim to one—which he received in payment for the stocks or shares. Were it the custom to sell stocks and

shares, like goods, on a credit of three months or longer, all this trouble would be unnecessary. The borrowing and lending of money would then be carried on to a much smaller extent than is now the case.

There are still other difficulties that may arise in connection with the advancing of capital. Goods are sold on credit, but when payment falls due the purchaser would like to defer it for a little while longer, and the seller does not happen to want his capital just then. The simplest way of arranging this affair would be to extend the term of payment. But no merchant who valued his reputation would ask for such an extension. A situation now arises very similar to the one which we analysed first, and it admits of a similar solution. Here again an intermediary is required, who will give credit to the buyer and accept credit from the seller, and thus bring the two parties together.

But a third case is possible, and by examining it we shall become acquainted with another aspect of the money market.

A person has sold a quantity of goods on credit and has accepted a promissory note for the amount. But before the note matures, he happens to want capital; he may have purchased some things for which cash payment is usually required. Here, again, a very simple plan could be found for settling the matter; the holder of the promissory note could use it to pay for the things he had purchased. Of course this mode of settlement could only be adopted in the event of the person who supplied the goods not happening to require capital at the time; but this is quite conceivable, and we shall assume that it is the case. As a matter of fact, advances of capital are constantly being made on acceptances of third parties. A merchant supplies cotton to a spinner, the spinner pays for it with an acceptance which he has received from somebody whom he has supplied with yarn, and the indebtedness of the latter is now to the merchant and no longer to the spinner; thus the whole matter is arranged without any recourse being had to the money market. But dealings of this sort are only possible between persons living in different countries, or at any rate in different towns. Those who send coffee to Germany, ironwares to America, or manufactured goods to

India, never receive payment in any other form than that of bills of exchange; that is to say, promises of third parties to pay. But between persons living in the same town, payment is very seldom made in this way. When one merchant in London has supplied another merchant in the same city with goods, and the time for payment has arrived, he does not expect to receive promissory notes or bills of exchange; he expects cash or something conferring a claim to cash.

It will be seen wherein the difficulty consists. On one side there is the capitalist who, according to our hypothesis, is not in present need of his capital, and is only too pleased to lend it on good security, so that it may continue to yield him interest until such time as he may have occasion to use it himself; on the other side there is a person who has an acceptance and wants to get capital in exchange for it. It is obvious that the parties will come together, for here again there is ultimate community of interests. Perhaps the capitalist will himself discount the acceptance, in which case he at once receives his own money in payment for the goods; it will be the same as if the exchange had after all been one in which the seller had taken a promissory note in payment for the goods. But a bank might also have acted the part of intermediary in the manner already indicated.

What are all these cases which we have been considering? They are examples of difficulties—chiefly due to trade customs—which arise in connection with the advancing of capital; all of them, however, are difficulties which can easily be surmounted. But why are they easily surmounted? Because in every case capital was forthcoming and could be had on loan. The person who sold for ready money was not in immediate need of the equivalent of his goods; in fact, he wanted to put it out at interest. The person whom it would have been inexpedient to ask for an extension might have granted it without suffering any inconvenience; and the acceptance, which it was impossible to offer to the seller of certain goods, has been taken as an investment by that very seller or by a bank in which he had deposited his money. There has been no real difficulty in any of these cases, at least none that could not be overcome by the exercise of a little thought.

We emphasise this in order to show what is meant by

the expressions scarcity and abundance as applied to the money market. What is meant is, that there is lack or abundance, not of *money*, but of opportunities for buying goods on credit; that is to say, lack or abundance of capital in various forms. We can easily convince ourselves of this. Suppose the reason for requiring ready money or for refusing a promissory note in payment for goods sold, to lie, not in the causes which we have assumed, but in the fact that the seller wants to employ his capital; he wants, for instance, to export goods to the same amount as those which he has sold, or to spend the proceeds of his sale in paying for labour employed in land improvements. Everything is now changed. The banks are again applied to for advances, but the deposits which, under other circumstances, would have enabled them to grant these applications are not forthcoming. The banks have therefore to draw upon their own resources. They are no longer the channels for enabling capital to pass from one person to another; they have to meet a demand for capital, but they are not being furnished with means for enabling them to do so. No important effects result when such a thing happens upon a small scale; but if the demand for capital is very brisk, if many people are needing capital in one form or another and only a few are able to supply it, the difficulty which arises is of a much more serious kind than any of those with which we have been dealing. For it has its origin, not in the fact that those who give and those who seek credit are unable to hit upon a plan for promoting their mutual interests, but in the fact that there is a demand for capital, and that it is impossible to meet that demand.

Just one more remark, however, in order to prevent misconception. Money is required in order to carry on banking business. If a bank is being largely applied to for loans, but if, at the same time, it is receiving on deposit sums amounting in the aggregate to the loans required, it might be supposed that it was being furnished with sufficient means to enable it to satisfy all requirements. This is not so; the bank must keep in reserve, and in the form of money, a part of the capital of which it acts as transfer agent. This money need not necessarily consist of gold and silver, it may consist of bank notes issued by a

central credit institution ; but every bank must have a certain cash reserve proportioned to the amount of its liabilities.

This need for money is the cause of much business between the various banks. Sometimes one bank will have a very large supply, while another is short of money. The former then transfers to the latter a part of the contents of its strong-room, receiving unmatured bills in return. As a rule, dealings of this sort are effected through the agency of a bill-broker and not directly between the banks. This business, which the banks carry on among themselves, has no effect on the aggregate demand for money, but we have thought it well just to allude to it.

The aggregate demand of bankers for money is of greater importance. It does not fluctuate very much—indeed, its fluctuations are remarkably slight in ordinary times ; nevertheless, circumstances may cause this demand to increase very much. For, the amount of money which a bank requires in order to be properly secured, is always more or less a matter of estimate, and we may be sure that at a time when events look threatening the amount deemed necessary will be larger than at other times.

But the demand for money is liable to fluctuation in commerce as well as in the money market. No sooner does business revive, more especially in those branches of commerce where ready-money payment obtains, than the need for more money becomes manifest. And to whom are merchants more likely to apply in such cases than to the banks ? Thus, the latter occasionally find themselves face to face with a demand for money, which they never expected and which they do not always find it convenient to meet.

These observations are meant, as we have already said, to prevent a misconception ; we mean the misconception that would arise from failure to recognise that a movement in the money market sometimes originates in the demand for *money*. In certain cases this demand is the sole cause producing a movement in the money market. We have described that market as the place where are devised those measures for governing the transfer of capital on credit which special circumstances may render necessary. But a certain amount of money is needed in order to devise those measures, an amount standing

in no relation, it is true, to the capital that has changed hands, but yet liable, under certain circumstances, to increase to such an extent as to produce apprehension. "Black Friday"—the 11th of May 1866—is a date that will ever be memorable in the history of English banking. It was the day on which the great banking house of Overend, Gurney and Company stopped payment, with liabilities amounting to something like £8,000,000 sterling. It was then that the movement, which had already previously begun in the English money market, reached its climax, since, to the usual demand for capital, there was now added a demand for money. From the moment when it became possible, owing to special measures taken by the Government, to satisfy the demand for money, the crisis was over.

It is certainly a great mistake to regard every demand for capital as a demand for money. In most cases of what is called demand for money, the object which people have in view is, not to increase their stock of ready money, but simply to obtain for a very brief space the means to enable them to attain some other object: means which could, in most cases, be dispensed with if trade customs permitted bills of exchange and promissory notes of third parties to be tendered as means of payment in local trade, and if they permitted merchants to ask for an extension of credit; and if, moreover, all things were sold on credit. Still, money may in certain cases be just the kind of capital the intending borrower requires. In order to judge properly of movements in the money market, it will always be necessary to endeavour to ascertain the real subject-matter of the demand for credit. This requires careful investigation, as the subject-matter is frequently obscured.

§ 5

The Origin of Interest on Capital

We now approach the real subject of the present chapter, namely, interest on capital. What does this expression mean?

Interest must not be confounded with rent. The word rent is always used with reference to fixed capital. The person who lets a thing, still remains the owner of it. As

soon as the lease expires, he recovers his right to dispose of the property in whatever way he may think fit. But the person who lends another a sum of money, or a certain quantity of wheat (as happens in some countries between landowners and tenants), does not expect the same coins or the same wheat to be restored to him; he expects the very opposite, in fact. Interest is the income derived from advancing circulating capital, and that capital becomes the property of the person to whom it is advanced. The distinction between rent and interest is important, not only from the jurist's, but also from the economist's point of view. The economic nature of interest becomes obscured when we regard it as rent.

We never make an exchange when we lease a thing; we always do so when we advance capital. The exchange involved in the advancing of capital is of a very special kind, however; it is an exchange of present against future things. If interest be stipulated, the future things will have to be more numerous than the present things. Interest on capital is a premium, on present, as against future things of equal value. This is not meant as an explanation of the origin of interest, but as an indication of the direction in which we must look for its origin.

There are cases, it is true, where the borrower does not undertake to pay back the capital, but to pay a perpetual interest. It would be wrong to suppose that in such a case our definition would not hold good. Supposing the rate of perpetual interest to be 4 per cent., the lender will, after twenty-five years, have got back as much as he has advanced, and will still be entitled to receive the same annual payment. Here, too, there has been an exchange of present against future things. The lender advances, say, £1,000, and in return he gets £40 multiplied by an indefinite number.

Interest can always be obtained for capital; exchanges such as we have described take place every day. There are always people who, for present money or goods, are prepared to promise a larger amount of future money or goods. The inference is obvious enough, but VON BÖHM-BAWERK, the Austrian writer, was the first to state it in his well-known

book on Capital.¹ The inference is this. If a premium can be obtained on present as against future things, then present things must, on the whole, be more valuable than future things. To inquire into the origin of interest is an attempt to explain this difference of value.

A manufacturer sells goods on three months' credit and offers to deduct 1 per cent. from the price for ready-money payment. By the mere fact of his making such an offer to a man whose credit is good, he shows that he places greater value upon present, than upon future things. A railway company raises a 3 per cent. loan of £500,000 at 10 per cent. below par and undertakes to redeem £10,000 of the stock each year at par. In this way the company obtains £450,000, but has to pay back, besides £50,000 in excess of that sum, interest amounting to £15,000 in the first year, £14,700 in the second, and so on, till in the fiftieth year there is still some interest (£300) to pay. Surely an unprofitable arrangement for this company, if VON BÖHM-BAWERK's proposition could not be applied to it. A house can be let for a rent of £140 per annum; the taxes and cost of repairs amount to £40 per annum, so that the net rent yielded by the house is £100. How profitable it would be to build such a house as this, if future money possessed the same value as present money in the estimation of the owner of house property! The house would fetch, on sale, £100 multiplied by a figure corresponding to the number of years for which it could be expected to yield a net rental of £100.

The proposition which we have enunciated is little else than an application of the truth that every market price which is not purely speculative indicates a value, in which it has its origin. It would be impossible to conceive of any reason why a premium should always be put upon present as compared with future goods or money, were it not that the former are esteemed more valuable than the latter. If both afforded the same amount of enjoyment—or, to employ once more the well-known technical expression, if the marginal utility of both were the same—then it would be for future goods alone that any demand would exist, and the premium would soon disappear. And as a matter of fact it does sometimes almost

¹ *Positive Theorie des Kapitals* (Innsbrück, 1889), p. 248.

disappear in a certain branch of the credit market which we shall make the subject of special inquiry later on. Whenever a large number of capitalists are unable, for the time, to find a means of employing the whole or part of their circulating capital, the rate of interest for short loans falls to a very low figure.

It may cause surprise that some people should have disputed VON BÖHM-BAWERK's proposition. All they have been able to do in this respect has been to point to a number of cases in which future goods are chosen in preference to present goods. It must be admitted at once that these cases are not of rare occurrence. We like to provide ourselves each day with the articles of food required for use on that day or the next; most of these articles would be in a very unsatisfactory condition by the time we wanted to use them if they reached us sooner. We like to provide ourselves with new clothing at the proper time, but always according to the needs of the moment. Even in the case of goods that are not liable to perish or to go out of fashion, we prefer that our supply should not reach us too soon: who would care to have delivered to him now all the fuel, wine, or water that he was likely to use during the remainder of his life? Money admits of being lent and can therefore never be unwelcome; if this were not so, we should be equally averse to receiving money before we required it for use, as few houses have places where it could be stored with absolute safety. Our wishes and wants must be satisfied at the right moment. This *may* have the result that, at a given moment, we prefer present to future things, but the reverse is also possible, and frequently the case.

But what does this reasoning prove? The number of persons who use tobacco is certainly far below the number of those who do not; nevertheless, tobacco has value. Corn growers do not buy corn, in fact they take it to market: yet corn yields money. An article may have value, even though the demand for it be confined to a portion of mankind, even though another portion of mankind be glad to dispose of it. In the same way, goods or gold may be worth more in the present than in the future, even though many should prefer them in the future. Everything depends upon the urgency

and extent of the demand in either direction, and in our case there is no uncertainty as to the side on which the demand is more urgent. If the number of people offering to supply, were to be equal to the number desiring to obtain, present in exchange for future things, and if supply and demand were equally extensive and equally pressing, it would be impossible for interest to emerge. The premium which present capital obtains when it is exchanged for future capital, proves incontestably that the former is scarce in relation to the latter.

It will be useful to pause here for a moment in order to point out an error into which certain socialists have fallen. Some writers, who have sacrificed accuracy to clearness, have wrongly represented interest as being the natural produce of capital, in the same way as apples are the produce of the apple-tree, or eggs the produce of fowl. This view of interest is fostered by the use of such an expression as "begetting interest." We have only to reflect for a moment in order to see that the income out of which interest on capital is paid is always obtained by means of labour. A sum of money, a stock of raw material, even a machine, produces nothing of itself. It is the labour, not the capital, that is productive; the labour for which the money is paid, and which converts the raw materials into manufactured articles or works the machine. The socialists were right in pointing this out, but they sometimes combined incorrect views with their criticism.

If, said they, all wealth be produced by labour, then labour alone has a claim to the wealth produced. Interest is an unjust tax levied by the capitalist. He owes his power of levying this tax to the organisation of society, which concedes to him the direction of production and the ownership of the instruments of production, thus enabling him to dictate terms to the labourer. But the tax, though permitted, is none the less unjust. Capital *per se* produces nothing and has therefore no right to receive anything.

In testing the soundness of this argument we have to distinguish between what the labourer gives and what he receives. He tills the soil—for a crop that has yet to grow. He works as a bricklayer—on a house that will not be finished for some months. He spins yarn—to serve as raw material for the weaver. Even if he be engaged in finishing

goods of every-day use, these goods have still to be packed and sent off—sometimes to distant countries—so as to reach the shopkeepers, who have to sort them and deliver them to the actual consumers. In short, he supplies, or helps to supply, goods which will not fulfil the purpose for which they are destined till some future time. On the other hand, what he receives in return for his services consists entirely of finished products. It is a serious mistake to regard these two different kinds of things as being equal in value. It is also a mistake not to regard the exceedingly important work performed by the *entrepreneur* as labour; but we let that pass in order to lay the whole stress upon the error of treating future goods as equal in value to present goods.

A co-operative society for production is formed. Its members are perfectly fitted for their work. They muster such a number of trades between them that they can even build the premises and make the machinery required by the society. But they have no capital. Therefore they apply to some one willing to lend it them, and get him to do so on terms with which they are quite satisfied. A fixed sum is lent them, with which they are to build the factory; they are also promised a succession of annual loans by way of advance upon the products, it being stipulated that these are always to be delivered to the lender as soon as they are finished. The first sum must be repaid out of the profits; the other advances are periodically recovered by the lender out of the proceeds of the sale of the products. He charges interest on his capital. And this interest, we are told, is an unjust tax, an appropriating of what belongs to the labourer! There is no more injustice in it than there is in the additional price charged by the merchant when he accepts inferior things in exchange for superior; or in the higher wage earned for superior labour. The capitalist enters into an agreement with the society, in virtue of which each party is entitled to be supplied with something by the other. But that which the capitalist is to supply exists already; that which the society is to supply has yet to be created, and it will be years before some of it is created. There is no equality of value here; and if the capitalist insists that the future things which are to be supplied to him

shall be more numerous than the present things which he is supplying, he only insists upon receiving his due.

There is another matter, of an entirely different kind, which has to be borne in mind in this connection. The function performed by owners of circulating capital has been frequently defined, more especially by English economists, as consisting in feeding and maintaining the workmen while they are engaged upon their labour. This definition is not only repellent in form, for it puts free-born workmen on a level with slaves, or even cattle; it is also inaccurate. The wage-earning workman provides for his own support; he pays for it out of the product of his labour. But he supplies—to borrow another of VON BÖHM-BAWERK's expressions—economically unripe products; the meaning of this expression will be understood from what has just been said. Products are not economically ripe until they are capable of becoming stock for consumption; the function of the capitalist consists in providing the workman with such economically ripe products in exchange for products of the other kind. He does not feed the workman, he purchases from him things that are yet unripe, so to speak, and pays him with money which can at once be converted into things fit for immediate consumption or use. By describing the function of the capitalist in this way, we not only avoid the use of terms borrowed from the language of slave owners, we also show much more clearly the purposes for which circulating capital is used and the source from which interest is derived.

Let us now endeavour to explain the premium which attaches to present goods. The explanation is to be found primarily in the fact that people cannot always draw upon their income in the time of need. Heavy demands may have to be met in the present. The merchant has to honour his bills; the farmer's crops are delayed or they fail; the workman loses his employment through sickness or other causes; the official has to settle bills requiring immediate payment, and it will be some weeks before he draws his salary. People in such circumstances as these are by nature disposed to assume that the difficulties will, before long, have disappeared, and in many cases they have good grounds for the assumption. The merchant assumes that before long he

will have disposed of his stock; the farmer feels sure that he will have better crops next year; the workman, that he will find employment; the official, that he will shortly be comparatively affluent. For these reasons, goods or money in the future are regarded as less valuable than in the present, and people are willing to pay a premium on them in order to get them at once.

Future goods can only serve for the satisfaction of future wants; the wants of the present can only be satisfied with things which actually exist. Nor is it sufficient that there exists a supply of goods in general, there must be a supply of the particular kind of goods required; the corn grower wants to exchange his corn, and the sugar refiner his sugar, for other things, and those other things must be in existence if the exchanges are to be effected. Commerce provides for this. Thus commerce requires a large amount of present goods, especially in trade with non-European countries. A close inspection of the manner in which foreign exchange operations are conducted will show that countries out of Europe take a long time to supply the equivalent of the goods sold to them.¹

The machines, manufactured goods, and other things which we in Europe send to countries in other parts of the world, are ultimately paid for with the produce of those countries, but not until some months after the arrival of the goods from Europe, for those countries are not in a position to exchange with us on any other terms. From the European point of view, this is an exchange of present for future goods; and the fact, that the existence of the former is a necessary condition of the exchange, is of itself a reason why it should be possible to obtain a premium upon them.

But the chief cause of the phenomenon, which we are endeavouring to explain, lies in the fact that all production requires time. The person who produces must either himself possess the means for supplying his wants during the time that he is engaged in the work of production, or he must manage to find some one who will pay him for his services. And the more extensive the work, the greater the quantity of present goods—in other words, circulating capital—that will

¹ Cf. the present author's essay, entitled "*Kapitaalbehoefte en internationaal verkeer*," in *De Economist* of January 1876.

be required. Now we know that works which take a long time to complete are often very productive. A person who builds houses in localities where the population is increasing will eventually be able to get good rents for them. Railway enterprises and land-improvement schemes frequently bring in large profits. In these cases people may have no hesitation in offering a high premium—expressed in future money or goods—for present money or goods, in the expectation that there will be an abundance of the former at their disposal later on.

It also takes time to manufacture implements and machinery, but great advantages are sometimes obtained by doing so. Not necessarily, however. The amount of advantage to be got by using a machine depends upon its cost and durability, and upon the extent to which labour can be saved by using it; in other words, upon the increased production that can be secured by its use. But daily experience shows that the conditions under which it is possible to get good results from the use of costly implements and machinery are fulfilled in a very large number of cases; and whenever this is so, an inducement is created for obtaining present goods, at a premium if necessary. Here again there is the prospect that the supply of future goods will be so abundant that some of them may easily be spared. VON BÖHM-BAWERK calls the manufacture and use of machinery and implements "round-about production." The production of the article desired is here achieved in an indirect manner; an intermediate product being first manufactured—something which possesses no value of itself, as it can only serve the purpose of an instrument for producing what is desired. The expression is well chosen, as it reminds us of the demand for capital arising out of the use of machinery.

Does all that has been said fully explain the origin of interest on capital; has it been made quite clear why a premium is obtained on present as compared with future money or goods? We should be mistaken if we thought so. We have shown that present needs may be very urgent; that commerce has need of circulating capital; that it may be advantageous to undertake works which it will take long to complete; that advantage is frequently to be got from the use of machinery. But all this merely proves that there must

always be a demand for present, in exchange for future goods ; not that this demand must result in a premium. One might argue as follows. Water is indispensable for life. If we had no water, we should die of thirst, the soil would yield nothing, we should have no power wherewith to drive our machinery, we should be unable to keep ourselves clean. Therefore water must be very dear. But we know that it can be had in most places for nothing, and we know why : because of its abundance. This illustration may show what is wanting to complete our explanation. The final reason why capital can procure interest is, that capital is relatively scarce. The premium obtainable for present, in exchange for future things indicates, as we have seen, that the former are more valuable. But all value has its origin in scarcity. Only "economic goods"¹ have value ; that is, only those goods of which the supply falls short of the amount required. This general proposition must be applicable here. All that has been said above fails to explain the origin of interest, unless it can be assumed that the demand for capital exceeds the supply. But the existence of interest proves that we are justified in assuming this.

§ 6

Causes of High and Low Rates of Interest

We must now consider the causes which determine the rate of interest. Let us first see from what part of the social income the capitalist obtains his interest.

He obtains it from that part which remains after the landowners have been paid their rent. From this there follows the important truth, that the rate of interest may be highest in those countries where rents are lowest owing to the abundance of fertile and well-situated tracts. We find this confirmed by a glance at North America, where interest is generally much higher than in Europe. It makes a great difference, not only to the workman, but also to the capitalist, whether he can share in practically the whole of the proceeds of the harvest, or only in the relatively small portion that remains after a high rent has been paid. In other words, the

¹ Cf. *ante*, chap. i. § 1.

agriculturist can offer a higher rate of interest when he is allowed to keep nearly the whole of the crops, than he can if he has to sell the greater part of them in order to pay rent.

But there is another part of the social income which we must not forget, namely, the profits of *entrepreneurs*, which will be fully dealt with in the next chapter. No *entrepreneur*, however great the advantages afforded him by having the use of capital, will be prepared to yield up the whole of those advantages to the capitalist; were he to do so, he would have no recompense for his trouble and risk. And a question arises here, the answer to which will show that the part of the social income from which the capitalist derives his interest is even smaller than it seemed at first.

The gain which it would be possible for one man to derive from the use of a certain amount of capital is not always the same as that which another man could derive from it. What regulates the rate of interest? Is it the highest or the lowest gains? A could afford to pay 10 per cent. and yet make a considerable profit; B could pay 9½ per cent.; Z could only pay 3 per cent. What will be the rate of interest under these circumstances?

It will have to drop to the point at which there will be a demand for all capital seeking investment. If the demand for capital among those who can afford to pay a high rate of interest be such that the whole of the available supply of capital can be invested with them, then a high rate of interest is possible; but should any capital remain uninvested after the demands of these people have been supplied, the rate of interest will have to drop to a lower figure. The same thing takes place here as in the letting of houses. The rate of interest does not depend upon the maximum or the mean, but upon the marginal utility of the capital for which investments are sought. We shall see later on what becomes of the gains which *entrepreneurs* who enjoy economic advantages over their competitors are not required to yield up to the capitalist, when they work with borrowed capital. For the present we shall confine ourselves to describing the law itself, which, as the student will doubtless already understand, is only a concrete expression of the general law to which all the phenomena of value are subject.

Here we have an explanation of the well-known truth that, as capital becomes more plentiful—other things being equal—the rate of interest falls. As the amount of capital increases, the less favourable do the conditions become, under which any portion of it must be employed, if investments are to be found for the whole of the capital offered for investment. Works for the improvement of the land will have to be undertaken and railways constructed at profits lower than those hitherto yielded by similar undertakings. Works of long duration will have to be undertaken in order to obtain advantages not proportionally greater than those hitherto yielded by works of shorter duration. Houses will have to be built, which will cause the rents obtainable for house property to fall. And as the capital invested in agriculture and industry can yield no fruit unless the services of workmen can be secured, those services will have to be recompensed more highly, so that the amount remaining for the capitalist will be smaller.

This latter point will be treated more fully in the next section, where the connection between interest and price is discussed; but proofs of its correctness are to be found in what has already been said as to the origin of interest on capital. The gross profit of the *entrepreneur*, out of which he pays the interest (or enjoys it, if he be a capitalist himself), originates firstly in the fact that he receives from his workmen products which will not be “ripe” until a certain time shall have elapsed, and that, in exchange, he enables them to obtain goods which have passed through all the stages of the ripening process. The difference in value between future and present goods, that is, the premium on the latter, must decrease as the relative quantity of present goods increases. The gross profit spoken of originates, secondly, in the use of machinery. But the use of machinery is not necessarily advantageous. The extent to which advantage may be got from it, and from providing the buildings required for that purpose—and these are frequently very expensive—depends upon a variety of things, among which the rate of interest occupies a prominent place. Suppose now that a certain number of machines are in use, and that capital increases, so that it becomes necessary to create a demand for more. This can only

be effected by creating an incentive for the use of those instruments of production, that is, by offering to lend capital at a lower rate of interest. In this way a stimulus is given to "roundabout production."

When tracing the results of the growth of capital, we must bear in mind that new capital is, in most cases, circulating capital. The demand for this kind of capital is certainly great, as well as elastic, but it is not unlimited. A certain amount is required to supply the needs of commerce; a further amount for the payment of wages; a portion is used as raw material; another portion, in supplying things on credit to persons whose incomes do not reach them in good time. But however great we may conceive the demand for present, as against future goods to be, the supply of the former would ultimately exceed the demand, if stocks kept constantly increasing. Capital can never be too plentiful, nor can production, in the aggregate, be excessive; but it is quite possible for a particular class of goods to be produced to excess; in the same way, one of the two kinds of capital may increase to such an extent that no price can be obtained for the use of it. An incessant and considerable growth of circulating capital would ultimately lead to the disappearance of interest. What prevents this from coming about? It is prevented by the following circumstances. A portion of circulating capital is consumed unproductively, by Governments and Municipalities, for instance, when they cover ordinary deficits by means of loans; another portion is consumed—productively, however—in such things as land improvement and the construction of harbours and similar public works. A third portion is converted into dwelling-houses, schools, and other buildings, which are very useful, but are not used for production in the economic sense. Finally, a fourth portion is converted into fixed capital. But in order to create a demand for land improvement, for dwelling accommodation, and for fixed capital, and in order to make it advantageous to carry out public works, the capitalist must be prepared to accept a lower rate of interest.

That is, unless the demand for capital should increase. We have been assuming that new capital was being created, while other things remained the same. But things may

happen, by which the condition of the capitalist is improved. The population may increase; this will certainly have a favourable effect upon agricultural rents, but not to the prejudice of interest, as capital is needed in order to bring virgin soil into cultivation; so that the unfavourable effects of the rise in rents will be confined to the wages of labourers. The movement of the population is of the utmost importance in connection with the demand for capital, as every new demand for products, or dwellings, means of transport, etc., necessarily leads to new demand for capital. This must be kept well in mind. Some people maintain that interest has a natural tendency to fall; but those who do so think only of the growing supply of capital, and fail to take into consideration the increasing demand caused by the growth of population, and there is no reason for believing that the supply of capital has a "natural tendency" to exceed the demand. In all civilised countries except France, the growth of the population is rapid. In some few countries, it is true, we find the birth-rate decreasing, but this is accompanied by a decreasing death-rate, due to improved sanitary conditions. The average yearly birth-rate of Holland from 1880 to 1889 was 3·44 per cent. of the population, as against 3·63 per cent. for the period 1870 to 1879. Nevertheless, the average yearly increase of the population from 1880 to 1889 was 12·43 per cent., as against 11·21 per cent. in the preceding period, the death-rate having fallen from 2·44 in the earlier to 2·12 per cent. in the later of the two periods.

A natural tendency to fall can be attributed to interest on capital only when there is reason to expect a less rapid growth of population in the future. Indeed, a very considerable fall in the rate of interest may be predicted, when there is reason to expect an absolute decrease of population; since a much smaller quantity of products, therefore a much smaller quantity of capital, would then be required. We should no longer have to keep extending the area under cultivation, building more factories, and providing increased means of transport; we should cease enlarging our towns and villages, a process in which so much capital is now used up. But however beneficial it might be, so far as the welfare of the working classes is concerned, if the population were to decrease

owing to a diminished birth-rate, we cannot be sure that this will take place. Consequently there is no solid foundation for the contention that interest on capital has a natural tendency to fall.

Apparent support has been lent to this contention in recent times by the fall which has actually been observed in the rate of interest. There is always a tendency to regard a thing that has been happening for many years in succession, as the effect of permanent causes, as something destined to go on for ever. In the year 1864 or thereabouts, when the rate of interest was very high, many people could not conceive of the possibility of its ever falling; in the same way, many people are now unable to believe that it will ever rise. There was a time during which agricultural rents rose continuously; many people then formed the idea that rents were destined to keep on rising without interruption; nevertheless, we have witnessed a considerable fall in rents in recent years. Production and population do not always increase at the same rate; each alternately gets ahead of the other. The same may be said of capital and population. If capital has been increased considerably by large profits and by saving, the rate of interest will remain low until the population, in its turn, has increased considerably; and, however rapid its increase may be, some years must always elapse before it can overtake capital. That is what is happening now; but who can say that it will last?

It is true that if capital increases *and other things remain the same*, the rate of interest must gradually fall; but it is one thing to acknowledge this truth and quite another thing to maintain that the rate of interest has a natural tendency to fall. Coincidentally with the creation of capital, something or other may take place which will have a favourable effect either upon the terms on which the capitalists share with the labourers, or upon the result of their joint efforts. Causes which have the effect of rendering more productive the joint efforts of capital and labour, are not always immediately advantageous to both. It may happen that the workmen get the whole of the advantage so long as their number does not increase; but it is also possible that the whole of the advantage may be enjoyed by the capitalists, so long as capital does

not increase very greatly. Whether, and to what extent, the one or the other will gain, depends in the first place upon the class of objects of the new demand which arises after the fall in the rate of interest; if the demand be directed towards goods, for the production of which much capital is needed, interest will rise more than wages, or the former alone will rise. The proportion in which capital and labour respectively contribute towards production differs very much in different articles; and although the *entrepreneur* can exercise a powerful influence upon that proportion, his power in this respect is not unlimited. For the production of some things a relatively large amount of capital will always be indispensable; this is the case with goods, the production or preparation of which takes a long time or calls for the use of expensive machinery, and with goods which have to be transported great distances before they reach their destination. When the increase of income brought about by progress achieved in agriculture or industry creates a strong demand for goods of this class, it is the capitalists who gain; similarly, it is the workpeople who gain when the demand is not for this class of goods.

Whether, and to what extent, the one or the other party will be the gainer, depends on yet another thing. Progress in agriculture and industry always consists in a saving of the exertion involved in production, that is to say, it consists in obtaining increased results without increased exertion. But the saving may extend in equal proportions to capital and labour; or it may be confined to capital alone or to labour alone. The proportion in which the product will be shared depends in some measure upon which of these three kinds of saving has been effected. People are everywhere bent on inventions, and successful inventions always mean economies. But in countries where wages are very high in relation to interest, those economies will be most advantageous which render it possible to employ fewer workmen, even though the adoption of those economies should make it necessary to employ more fixed capital; on the other hand, when wages are low and the rate of interest is high, more importance will be attached to things which render economy of capital possible, even though their use should render it necessary to employ more labour. We find the first of these cases illustrated in

the United States. There interest is high, but not in relation to wages; these are higher still in proportion to what they are in European countries; the result is that there is no part of the world where more attention is given to improvements in machinery than in the United States. The tropics afford an illustration of the second case; there wages are low; not so low, indeed, as they seem (since the amount of labour performed in tropical countries for a very low daily wage is frequently as small as the wage itself), but still, on the whole, lower than they are in Europe; but in tropical countries the rate of interest is, as a rule, higher than in Europe, and inventions and discoveries are there valued more especially according to their efficiency as means of economising capital.

Whatever the direction in which the *entrepreneur* may seek his own advantage, we may feel sure that in the long-run labour will derive gain from industrial progress; the greater the results achieved by the employment of capital and labour, the better for the general welfare. But economies of the kind referred to above may, at first, have the effect of rendering a part of capital and a part of labour superfluous. As far as the capitalist is concerned, they are more advantageous when they apply exclusively to labour; so long as capital does not increase to any great extent, the rate of interest will then remain high. All this will be explained more fully in the chapter dealing with wages.

Another thing that operates in favour of interest is the removal of artificial barriers to international trade, though here again the favourable effect is not confined to interest. In a later portion of this work we shall explain why protection is detrimental to public wealth in general. Here we propose to show how it tends to lower the rate of interest. It does so by preventing the capitalist from using his capital to the best advantage. It is not necessary that we should go just yet into the scientific questions relating to the connection between imports and exports; it will be sufficient to point out that when any of the principal States increases its import duties, a tariff war invariably results. This of itself is enough to impede exports from such a country and to prevent capital from being employed there to the best advantage.

The injury is not confined to this. The greater the amount of trade carried on between nations, the greater will be the demand for means of transport, and the larger the amount of capital needed by merchants. Restriction of international trade, of itself, and apart from any other results which it may bring about, has a tendency to reduce the demand for capital. Should not the growth of protection in recent years be therefore ranked among the causes which have conduced to the fall in the rate of interest? We are inclined to think so, considering that increase of production and trade would ensue everywhere if all nations were to adopt liberal tariffs.

Finally, a word as to reduction in the duration and cost of transport. This also is sure to bring about, at first, a reduction in the demand for capital; the merchant has not to wait so long before he receives the equivalent of the goods which he has exported; moreover, the stocks required by merchants dealing in goods procured from distant countries will now be smaller. But ultimately the effect will be different. Traffic will be increased considerably by the reduction of freights. Enterprises which were previously impossible will now be possible. Attention will be turned to parts of the globe previously neglected, though rich, perhaps, in natural resources. Owing to all this, the demand for capital will be stimulated, and it is probable that capitalists will be gainers rather than losers by the reduction of freights and the increased rapidity of communication.

The principal causes which influence the rate of interest have now been mentioned or indicated. It has also been shown that interest and wages are closely connected. An increase in the rate of interest is detrimental to wages (including wages of *entrepreneurs*) until production under the most unfavourable circumstances in which it has to be carried on while providing investments for all available capital, and employment for all labour seeking to be employed, has become more profitable. This conclusion has an important bearing upon the theory of wages; but it also has an important bearing upon the theory of interest, as we now propose to show.

§ 7

Demand and Supply of Capital equalised by Changes in the Rates of Interest and Wages

Hitherto, in speaking of *interest*, we have invariably used that word in its customary sense, namely, that of the payment made in return for the loan of capital. But many enterprises are carried on without the aid of borrowed capital, and a capitalist, who works with his own capital, does not thereby forfeit the income which that capital is capable of yielding in the form of interest. Just as it is possible for the landowner to reap the advantage which his land is capable of yielding in the shape of rent, even though he attend to its cultivation himself; or for the carpenter to benefit by the skill which he has in his trade, even if he does not work for wages; so also is it possible for the capitalist to enjoy an income over and above his profits as an *entrepreneur*, inasmuch as he is spared the necessity of borrowing capital. It is no misuse of terms to speak of this income as *interest*, seeing that this word is frequently applied to it. If, for example, when the rate of interest is 4 per cent. per annum, an *entrepreneur* working with his own capital earns exactly that much in a year, he will probably say that he made no profit, but only interest.

Using the word in this extended sense, we are justified in stating that interest is included in the prices of all goods from the production of which normal, or more than normal incomes are obtained. And if these incomes have been obtained under the least favourable conditions, they consist entirely of wages and interest. It must not be supposed that we are now losing sight of profit, for the only element of profit enjoyed by the *entrepreneur* who has no economic advantages over his competitors, consists in his wages of superintendence, and, as we shall prove later on, these must be ranked in the same category as wages of labour. When we analyse the price of a commodity produced by a person who has only been able to earn a normal recompense for his trouble and for the employment of his capital, or when we analyse the price of a product obtained from land from which

no rent, or a merely nominal rent, can be obtained, we find the price to be composed of interest and wages only. The commodity may also have been obtained under more favourable circumstances. It may have been manufactured by an *entrepreneur* who earns more than others of his class, or grown on very fertile and well-situated land. Additional elements will then enter into the composition of the price, but why? The price of the article must be high enough to induce holders to place a given quantity of it in the market; it will not be possible for that quantity to be offered unless the price be $w + i$,¹ for example. Some *entrepreneurs* are so favourably circumstanced that they could afford to sell it at three-fourths or one-half that price, and yet make a profit. What they receive, therefore, includes something over and above $w + i$. That surplus is a gain which accrues to them, and which would be less in the case of some and would disappear in the case of others of them, if their own production were sufficient to supply all that was required of the article.

Wages and interest are the only elements composing the prices of products obtained on the economic margin of production. But we know enough already about the theory of value to be aware that it is precisely the condition of things existing at that margin that is of importance. How far must it extend in relation to the demand? How much labour and how much capital must be employed there? The figures which have to be substituted there for $w + i$ do not absolutely determine the prices, for there are other influencing factors as well; nevertheless their importance is very great, so that the question which we are now about to put is a very important one.

We have just seen that, so long as production under the most unfavourable conditions in which it has to be carried on while providing employment for all who are offering to sell their labour, and investments for all who are seeking to invest their capital—using our recent terminology again, we should say, so long as production upon its economic margin—does not become more profitable, interest can only rise at the expense of wages. Now for our question. Does this imply that prices are in no way influenced by the rise or fall of the rate of interest? The answer is, No; but it is very important that

¹ w = wages; i = interest.—A. A. W.

we should see why the answer must be in the negative. The reason is, that while one price consists of much wages and little interest, another consists of much interest and little wages. This is the only reason; were it not true, prices would be unaffected by changes in the rates of wages and interest. The proportion in which the products, or that which they realised, should be shared, would then be a matter for arrangement among those who took part in the production, and they would concern no one else, and the goods relatively to each other would be worth what they cost in labour on the economic margin of production.

RICARDO was the first to show this. His demonstration has given rise to a strange and very common misconception;¹ it has caused him to be called the intellectual father of the socialist MARX, who has denied the justice of interest. But what connection is there between the argument set forth above and the justice of interest? The price of an article A is composed of interest amounting to 30*d.* and wages amounting to 70*d.*, the latter being the cost of 10 hours of labour; the price of an article B consists of 60*d.* of interest and 140*d.* of wages, the latter being the cost of 20 hours of labour. These articles will therefore be exchangeable for each other in the proportion of two of A to one of B; exactly the same proportion as exists between the amounts of labour required to produce them, since the same proportion exists between the amounts of capital that had to be applied in doing so. Does this mean that no recompense is obtained for the capital employed? Even if the goods were never exchangeable in any other proportion than that of the labour involved in their production, it would not follow that there was no interest, still less that interest was unjustifiable. It would simply be an interesting phenomenon to be explained by the theory of value.

The misconception becomes still more surprising when we come to consider that RICARDO has declared exactly the reverse of what has been attributed to him. He has *not* said that changes in the rates of wages and interest have no influence whatever upon the ratio in which goods are exchanged

¹ Cf. Dr. C. A. VERRIJN STUART's interesting academic thesis, entitled *Ricardo en Marx*, The Hague, 1890.

for one another. He has shown that they *would have* no influence in the case which we have just been assuming, a case, however, which does not exist in fact. In demonstrating this, he has enabled us to see the causes of this influence, namely, the varying proportion in which wages and interest enter respectively into the composition of prices. The manner in which this cause operates may be seen from some illustrations. Suppose that it is found upon analysis that the prices of three articles (expressed in pence) are made up as follows:—

	Article A.	Article B.	Article C.
	<i>d.</i>	<i>d.</i>	<i>d.</i>
Wages . . .	70	105	140
Interest . . .	30	45	60
	<hr/>	<hr/>	<hr/>
Total . . .	100	150	200

If, owing to wages falling and interest rising, the price of Article A comes to consist of $60d. + 40d.$ in wages and interest respectively, then the price of B will become $90d. + 60d.$, and that of C $120d. + 80d.$; so that A will still continue to be worth $100d.$, B $150d.$, and C $200d.$ The reason of this is, that the proportion between wages and interest was originally the same in each of the articles, and that when a new proportion was substituted for the old one ($6:4$ instead of $7:3$), this also was found to prevail in each of the three prices.

Let us change the hypothesis; suppose different proportions for the three articles; suppose further, that the general aggregate of wages falls, and that what it thus loses is gained by the general aggregate of interest. The first of these aggregates, namely wages, might be represented by the figure 70, for example; the second, namely interest, by the figure 30.¹ A decrease of wages in favour of interest to the extent of 10 will then bring the former down to 60 and the latter up to 40; that is to say, wages will be reduced by one-seventh and interest increased by one-third.

Suppose also that the prices of three articles, A, B, and C, are made up of the following sums in wages and interest (expressed in pence):—

¹ These figures are explained below (p. 223, *post*).

	Article A.	Article B.	Article C.
	<i>d.</i>	<i>d.</i>	<i>d.</i>
Wages . . .	70	50	30
Interest . . .	30	50	70
	<hr/>	<hr/>	<hr/>
Price . . .	100	100	100

A fall of wages to the extent of one-seventh, accompanied by a rise of interest to the extent of one-third, will now cause the following changes to take place in the prices which these articles will have to fetch in order to make it possible for a normal income to be earned on the economic margin of production of those articles:—

	Article A.	Article B.	Article C.
	<i>d.</i>	<i>d.</i>	<i>d.</i>
Wages . . .	60	43	26
Interest . . .	40	67	93
	<hr/>	<hr/>	<hr/>
Price . . .	100	110	119

But will it be possible to dispose of articles B and C at the increased prices? Hitherto, 100*d.* has been all that it has been possible to get for them, now a price of 110*d.* is being asked for B, and a price of 119*d.* for C. There is no reason for assuming that the consumers will pay these prices. They were not disposed to do so before, and there is nothing in our hypothesis to justify the assumption that their ability or desire to purchase has been increased.

The deduction is obvious: the demand for B and C, especially for the latter, will slacken. But whenever the demand for products which cost much in the shape of interest diminishes, there is a decrease in the amount of capital required. Does it follow from this that a condition of things has been brought about which cannot be maintained, since the equilibrium has been disturbed?

Not necessarily. If the reduction of wages has been brought about by artificial means, not by increase of population; if the increase of interest is due to combination among capitalists, and not to the cause just mentioned, or to a diminution of capital,—then, indeed, such a condition of things will have supervened. But if what has happened be due to

the free operation of demand and supply, the slackening of the demand for capital will disturb no equilibrium; on the contrary, it will readjust an equilibrium previously disturbed. In other words, the fall in the wages and the corresponding increase in the rate of interest will in that case restore the equilibrium which previously existed between demand and supply of capital.

It is chiefly in the manner just described that equilibrium is here brought about in the first instance, and restored as often as it is destroyed. All interest and all wages, in agriculture, industry, and other forms of production, are incorporated in the prices; on the prices, therefore, it depends how much shall be enjoyed by the producers in interest and wages together. But, owing to the causes which have been stated, it also depends largely upon the prices how much shall be enjoyed in the shape of interest and how much in the shape of wages respectively. If the proportion of interest to wages were the same in every price, it is not improbable that the manner in which incomes were apportioned between capital and labour would to some extent depend upon how far each party was able to enforce its claims. The abuse which Germans designate by the word *Ausbeutung*¹ would then perhaps be possible upon a large scale. As things are, however, this abuse, unless it be confined to individual instances, has the effect of lessening the demand for capital, and thus brings its own retribution. A certain amount of capital becomes redundant, and remains so until interest and wages have returned to their proper level.

The student will find additional reason for adhering to this view when he has considered a point which merits attention in this connection, but which we have passed over so as not to interrupt the course of our demonstration. In our illustration² we gave an example of the general aggregate of interest being increased at the expense of wages, by supposing the latter to have fallen from 70 to 60, and the former to have risen from 30 to 40; from this it was deduced that wages had only fallen by one-seventh, whereas interest had risen by one-third. Both figures are hypothetical, as there are no statistics showing, for the whole of production, the amount of the incomes received

¹ i.e. exploitation (A. A. W.).

² Cf. *ante*, p. 221.

in the shape of wages and the amount received in the shape of interest. But the working classes are so numerous, and capital—we do not say property, which includes land and Government and Municipal stocks, but capital—is so scarce, that the aggregate of wages must be regarded as far in excess of that of interest. We cannot be certain that a reduction to the extent of one-seventh in incomes consisting of wages will bring about an increase of exactly one-third in interest; but we can be certain that the latter fraction must be greater than the former. What deductions are to be drawn from this in regard to the question whether an artificial reduction of the standard of wages is conceivable, may be seen from the following.

A fall of one-seventh in wages would diminish the cost of building a house by a very much smaller proportion than one-seventh, since the expenses include other items besides wages. But even though the reduction in the cost of building amounted to that much, it would, if accompanied by a rise in the rate of interest by one-third, diminish the advantages to be got by building. If the building expenses had formerly amounted to £2,100, and the rate of interest had been $4\frac{1}{2}$ per cent., the figures would now be £1,800 and 6 per cent. respectively, the result of which would be that a larger sum would have to be expended in paying interest than before, since

$$\begin{array}{l} \text{£2,100 at } 4\frac{1}{2} \text{ per cent.} = \text{£94 : 10s.} \\ \text{£1,800 at 6} \quad \quad \quad \text{,,} \quad \quad = \text{£108.} \end{array}$$

It is therefore probable that many building schemes that would have been carried out under the old condition of things would be abandoned.

What has just been said about houses applies equally to railways and other public works, and to the improvement of the land. The incentive to execute such works is certainly strengthened by a fall in wages, but it is weakened by a rise in the rate of interest, and the operation of the latter cause will preponderate if the proportion in which interest has risen exceeds that in which wages have fallen.

One thing more remains to be said. The lowering of wages, of itself, reduces the amount of capital required. We

showed above,¹ when discussing the doctrine of certain socialists, that the function of the capitalist towards labour consists, to a great extent, in furnishing present goods in exchange for future and technically or economically unfinished goods. The smaller the amount of present goods supplied, the less capital will be required in discharging this function. This shows once more that if the rate of interest be forced up by artificial means, to the detriment of wages, a disturbance of the equilibrium between demand and supply of capital is bound to follow speedily. Once more our conclusion is, that the abuse will bring about its own retribution. The raising of the rate of interest operates in all sorts of ways to the detriment of demand for capital. This detrimental action readjusts the balance between demand and supply when capital in the aggregate has diminished, or when the demand for capital has grown excessively. In other cases it disturbs that balance.

Considering the manifold imperfections of the social structure, it is comforting to be able to arrive at this conclusion. It is a patch of sunshine which we must not ignore in a prospect of which so much is enveloped in gloom.

§ 8

The Interest for Short Credits

It now remains for us to discuss the differences in rates of interest for equal periods of time in one and the same country. That, in places where the system prevails of lending on the security of stocks without a margin, the interest depends upon the nature of the stock given as security; that bills of exchange bearing three or more signatures can usually be discounted at a lower rate than others; that small shopkeepers have to pay a much higher rate of interest in the shape of credit-prices than wholesale dealers; in short, that the rate of interest is always higher in proportion as the securities offered by the borrower appear to be poorer; all this speaks for itself. There is just one observation to be made in passing. Whenever a very high rate of interest is charged owing to the

¹ Cf. *ante*, p. 204.

small amount of confidence inspired by the borrower, it is usually said to consist to a large extent of "insurance premium." This is inaccurate. What the borrower pays in such cases is not compounded of two ingredients, interest and something else; it consists of interest alone, but that interest is higher than it would be if the borrower inspired more confidence.

But there are inequalities in rates of interest which are not to be accounted for by these and similar causes. They are those which are frequently observable in comparing the rates for *short* with those for *long* credits. Sometimes one will be higher, sometimes the other, and, generally speaking, the former are more subject to variation than the latter. We will endeavour to explain this.

The quantity of capital available for the purpose of being lent for short terms is not at all times the same, nor is the demand for such capital always equally strong. Suppose that an exceptionally large number of people in a particular country are desirous of exporting goods, and that they will receive the equivalent of those goods within a relatively short time; in so far as they want credit at all, it will be for a short period only. Or, suppose that there is a particularly strong demand for foreign stocks and shares, we then find a large amount of capital, in the shape of goods or gold, leaving the country in payment for those stocks and shares, and it is not improbable that this capital will at first be drawn from the quantity which is usually available for the purpose of making loans for short terms. The reason why this quantity is so liable to fluctuate, is that it is almost invariably the first to be drawn upon in the case of a sudden demand for capital. For instance, when a Government raises a loan, a certain time always elapses before the bonds which it issues get into the hands of permanent investors; the first holders are frequently people who have taken the scrip as a speculation, and paid for it with borrowed money. Consequently the rate of interest for short credits is subject to fluctuations, which it would be wrong to regard as fluctuations in the rate of interest for the loan of capital in general. The last-named rate cannot, it is true, rise or fall in the long-run without a change taking place in the rate for short credits as well. There is a connection, for

instance, between the rate of interest on mortgages and that for loans on stocks; between the rate for which a railway company of good standing can borrow money for a term of forty or fifty years, and the rate for discounting bills of exchange. But for a time this connection may be, and frequently is, severed.

The interest for short credits is generally lowest when the spirit of enterprise is slack. Many will then be unwilling to employ their capital; but they will be equally reluctant to lend it out for a long period, because business may suddenly revive, notwithstanding the unpromising outlook of the present. Therefore, they offer to lend their capital for short terms; but those to whom they offer it are as dispirited as themselves and will only accept it at a low rate of interest. This state of things prevails more especially after a commercial crisis. It is precisely then that one would expect to find a high rate of interest, owing to the destruction of capital that has just been taking place; but the spirit of enterprise is so slack that the amount of capital offered for short terms is far in excess of the demand.

In this connection we have to discuss a matter as to which a good deal of misconception exists. We refer to the question as to how far the stock of money exercises an influence upon the rate of interest.

At one time it was thought to exercise a predominating influence. An imperfect analysis of the phenomena occurring in the credit market led to the opinion that in all credit dealings the thing required and supplied was money; from this it was concluded that the rate of interest must depend upon the existing stock of money. The so-called Mercantile school, to which nearly all economic writers of the seventeenth and first half of the eighteenth centuries may be said to have belonged, was especially ardent in support of this conclusion. Impressed by the importance which a low rate of interest possesses for the furtherance of enterprise, the Mercantile school strongly advocated a commercial policy directed towards increasing the stock of money. It is strange indeed how this erroneous view concerning the rate of interest should have continued to be held for so long, considering that selling on credit is a far commoner method of advancing capital than

granting loans, and that far more interest is earned by means of the former than by means of the latter kind of transactions. But people failed to see this. The Mercantile system has been refuted in various ways; to us it seems that the most effective way of refuting it consists in showing precisely what takes place in the credit market. Once people can be made to understand that, in nine cases out of ten, "demand for money" is simply demand for goods or stock, on terms of present delivery against future payment, or the need for an extension of credit only obtainable by roundabout methods,—once people can be made to understand this, they will cease to have any bias towards mercantilism. It is a doctrine which can only appeal to those who have not observed the working of the credit market with much attention.

Increase of the stock of money, therefore, never exercises a lasting influence in the direction of lowering the rate of interest; rather is it by a constant decrease of the stock of money that such a result is brought about. A nation which, by means of a well-organised system of banking and the adoption of rational usages in commerce, reduces its requirements in the matter of gold and silver, will be benefited to the same extent as if it had created an amount of capital corresponding in value to the quantity of precious metal which it has succeeded in dispensing with. Whenever the credit system renders it possible to do without metallic money, it performs a service which would otherwise have to be performed by capital, so that it becomes possible to apply a portion of the latter to more useful purposes.

But there is still another doctrine concerning the connection between the rate of interest and the stock of money. It is of more recent origin than that of the Mercantile school, and better deserving of our attention. According to this doctrine, the stock of money does not, indeed, exercise a lasting influence upon the rate of interest for loaned capital, but it does exercise a temporary influence upon the rate of interest for short credits. This is held to be proved by facts. Does not the rate of interest go up when precious metals are exported, and down when they are imported? Do not financial journals, when discussing the probable movements in the rate of discount, direct the reader's

attention chiefly to the stock of gold in the banks? All this is regarded as tending to prove that the Mercantile doctrine, though on the whole, perhaps, incorrect, does nevertheless contain a grain of truth. This grain of truth is stated to be, that diminution of the quantity of money in a country causes interest on capital lent for short terms to rise temporarily in that country, whereas increase of the quantity of money produces the opposite effect.

How are we to regard this doctrine? In the first place, there is a great want of clearness about it. What does it mean? Are we to understand that the effects spoken of are produced by increase or decrease of the quantity of money of every kind, paper as well as metallic? If so, the proofs adduced can hardly be accepted as such. For export of precious metals is usually accompanied by a proportionate increase in the issue of uncovered bank notes; and when gold and silver are imported we usually find that a corresponding shrinkage takes place in the issue of uncovered notes. In both cases, therefore, the quantity of money (metallic and paper together) generally remains the same. This is a point which will be explained at greater length further on, and can only be touched upon for the present. Its importance in connection with the question with which we are now concerned will, however, be obvious. If the rate of interest rises when precious metals are exported, and if bank notes supply the place of the money that has been exported, the rise in the rate of interest cannot be the result of diminution in the quantity of money, since no such diminution has taken place.

Or is this doctrine, which we are now examining, to be understood as applying not to money in general, but only to gold and silver? But even then the proofs adduced in its support are inadequate. For, in the first place, it is not true that export of precious metals is always accompanied by a rise in the rate of interest. When the banks have very large stocks of gold, they allow it to issue freely without making any change in the rate of interest. And in the second place, export of precious metals frequently causes a decrease, and import an increase, in the existing quantity of capital; and when this is the case, there is no reason to be surprised that the rate of interest should not remain the same. To give a

few illustrations. Crops have failed and corn has to be purchased abroad. A foreign Government contracts a loan and causes the amount of the loan to be sent to it. Large amounts of foreign stock arrive and have to be paid for. Large loans have been granted to firms abroad and the amounts have to be sent out to them. It is by no means certain, as we shall find occasion to show, that, under circumstances like these, a drain of gold will follow; but something will have to be exported, and it may turn out to be gold. Should this be the case, and should the rate of interest then rise, would this be a reason for concluding that decrease of precious metals, apart from all other causes, suffices to bring about a rise in the rate of interest? Certainly not, for in the cases named, the export of gold means diminution of capital, and that of itself would quite account for the rise in the rate of interest.

We do not intend by all this to deny that any connection whatever exists between the stock of money and the rate of interest. We merely wish to show that no evidence of such a connection is furnished by the facts adduced for the purpose of proving it; and, moreover, that there is a great deal of obscurity about the doctrine propounded on the strength of those facts.

There is, in fact, a temporary connection between the quantity of money (of all kinds) existing in a country and the terms upon which it is possible to obtain capital for short periods in that country. And this connection manifests itself in two ways. Sometimes the quantity of money increases, and, as a result, the rate of interest falls; but sometimes the order of events is reversed: first there is a fall in the rate of interest, and, as a result, the quantity of money decreases.

Money—by which we mean bank notes as well as coin—is a sort of merchandise having this peculiar attribute, that it can constitute the object of a credit contract without at the same time constituting the object of a purchase contract. We can quite well imagine ordinary articles of commerce being lent in the same way as money; we can imagine one merchant, for instance, lending a quantity of goods to another on the condition of receiving back an equal quantity at a

future date. But this custom does not obtain among merchants, a circumstance which is of importance here.

A person exports coffee and receives wool in exchange for it. The wool will have to be unpacked, sorted, valued, and sold; what a time may elapse before it forms a part of capital actually in course of being applied! A person exports coffee and receives gold in exchange for it; forthwith the gold gets into circulation. If the owner does not require it for a month, he will take care that it yields interest for that time. He will discount a bill and afterwards sell it; or he will invest his money by lending it on the Stock Exchange, or deposit it with a bank, and the bank will do with it what he would otherwise have done with it himself. In fact, the bank will do much more. For the more plentifully the banks are supplied with money, the more manifold the services they are able to render. In a country with a highly developed system of banking, the influx of precious metal necessarily exercises a much stronger effect upon the rate of interest than in a country where there are no banks, or none that discharge an important function in the commerce of the country.

It is clear that a reduction of interest brought about in this manner must be temporary. There has been no new capital created or imported from abroad. A quantity of capital (the equivalent for goods sold to foreign purchasers) has got into circulation sooner than usual; that is all. It may therefore be predicted that, before long, interest will certainly rise to its former level, and that it will probably rise beyond that level. For, the fall in the rate of interest will have stimulated the demand for capital, and the increased demand will not be offset by an increased supply.

In the illustration just given, the increase in the quantity of money was the cause, but it may also be the effect, of a fall in the rate of interest.

To a great extent it depends upon the banks themselves, to what extent they will be used as agents for the transfer of capital. A merchant has sold a quantity of goods and is disposed to give the purchaser three months' credit. But the purchaser need not avail himself of this disposition on the part of the vendor, and he will certainly not do so, if the discount he can get by paying ready money exceeds the

interest he would have to pay for a loan at the bank. From this it will be seen that, by charging low rates of interest, the banks can foster the demand for credit; in fact, this is their usual method of fostering that demand. But a bank always gives its advances in the form of notes or credit entries in its books, so that an increase in the credit business of the banks has the direct result of rendering money—that is, paper money—more abundant. This abundance will not last long, it is true; whatever the amount of paper money put into circulation by the banks, that amount of precious metal will ultimately leave the country; still, a certain increase in the quantity of money of all kinds, however brief its duration, will undoubtedly result from the reduction of the rate of interest in the money market.

From this it will be seen that some connection really does exist between the stock of money and the rate of interest for short credits; it will be seen, too, that this connection manifests itself in two ways; increase of money is alternately a cause and a result of reduction in the rate of interest.

It seems better, however, not to pursue these inquiries any further at present; they would lead us to ground which cannot be fully explored till later. All economic truths are connected with others, but this is more especially the case with those having reference to capital and interest. This is due to the important and many-sided functions of capital, and to the variety of the forms assumed by interest. It has not, therefore, been possible here to exhaust the matter selected for treatment in this chapter; we have only been able to indicate its most important points.

CHAPTER V

THE PROFITS OF ENTREPRENEURS

§ 1

The Services rendered by Entrepreneurs

THE word profit has no fixed meaning in every-day language ; sometimes we find it used in a wide, sometimes in a restricted sense. A joint-stock company has a capital of £100,000, and has earned £6,000 in a given year. If the whole of the capital belongs to the company, the net profits will be said to have amounted to £6,000. But if half of the capital has been obtained by the issue of debentures, on which interest amounting to £2,500 has to be paid, it will be said that the net profits of the company amount, not to £6,000, but to £3,500 only. Yet in both cases the same result will have been achieved.

A merchant or a manufacturer earns £2,500 per annum ; he converts his business into a company, in which he himself is practically the sole shareholder and at the same time the manager. As manager, he receives, under the bye-laws of the company, a salary of £1,000 per annum. Now, although the business may continue to yield £2,500 per annum, its net profits will be said to be £1,500 only ; for the manager's salary, which was formerly called profit, is now called wages.

Enough has been said to show that any inquiry into the profits of *entrepreneurs* must be preceded by a definition of profits.¹ In the following pages we shall endeavour to arrive at such a definition.

¹ The following are the best works on the subject : Dr. H. VON MANGOLDT, *Die Lehre von dem Unternehmergewinn*, Leipzig, 1855 ; Dr. G. GROSS, *Die Lehre*

Land, capital, and labour are the principal factors of production; but for the purpose of providing for the wants of mankind, it is necessary that these factors should be placed in a proper relation to each other. The person who assumes the task of so placing them is the *entrepreneur*; this is the service which he renders. His work consists in regulating, guiding, combining. He supervises the work and sees that it is carried out at the smallest possible cost. He buys the material, selects the machinery, chooses the place in which the work shall be carried on; frequently too—if he should happen not to have any orders in hand—he decides what goods shall be produced. It is he who engages and discharges the persons who execute the various branches of the work. If middlemen are required for the purpose of retailing the products to the consumers, *entrepreneurs* will undertake the task. Should there be a temporary glut in an article, *entrepreneurs* will withdraw a portion of the stock from consumption, and place it in the market when the article has again become scarce. Although the *entrepreneur*, as such, performs no manual labour, he fulfils an important rôle. His task may be comprehensive, and it may be more exhausting than that of the most assiduous labourer.

How does he come to be entrusted with this task? Why is it that nobody opposes his decisions, and that he is allowed a free hand in combining the factors of production in such manner, and in employing them in such way, as may seem best to him? To the *entrepreneur* of good standing neither capital nor land nor labour is ever refused. By employing them injudiciously, he may incur derision or censure; but he will not be impeded in the execution of his plans. The reason is, that he alone has a direct interest in the result. The landowner gets his rent, the lender of capital his interest, the labourer his wages; each of these persons is thus assured an income proportioned to his services, but irrespective of the result of the undertaking for which those services are required. The question whether there will be loss or profit, whether, in a given case, the factors of pro-

from *Unternehmergewinn*, Leipzig, 1884; and Dr. V. MATAJA, *Der Unternehmergewinn*, Vienna, 1884. [I cannot wholly adopt the views of any of these authors; but my views do not differ widely from those of VON MANGOLDT.]

duction will be employed to the worst or the best advantage, has no direct influence upon the compensation of landowner, capitalist, or labourer; but it has upon that of the *entrepreneur*, for with him rests the responsibility of the enterprise. That is why he is entrusted with the control of so many important interests. People rely on the soundness of his judgment, because they know that any false step which he may take will bring him loss, whereas prudence combined with courage and discernment will lead to his advantage.

Thus the *entrepreneur* not only guides and controls, he also incurs risk. He may open a shop and get no customers; he may build a factory and find that his products do not sell; when he orders or exports goods, he runs a risk of losing capital. The chances of loss may be many or few; no enterprise is conceivable in which the *entrepreneur* does not incur a certain risk. Those who wish to avoid such risk must put out their capital at interest, or give their services in return for wages or salary.

The *entrepreneur*, therefore, incurs a special kind of risk. The person who puts out his capital at interest also incurs risk; his debtor may be insolvent, the securities on which he advanced his money may prove inadequate. Even the labourer is not always sure of receiving the full amount of the wages for which he has agreed to work. The *entrepreneur* is also exposed to risks of this kind, but at the same time he incurs a further risk from which the other two classes of persons are immune. His efforts and anxiety go for nothing, in fact they cause him damage, not only in the event of one or other of his debtors stopping payment, but also in the event of his enterprise failing to meet the wants of the community. A merchant sends manufactured goods to Java; his venture will result in loss if it should happen that the market in Java is so glutted with manufactured goods that the article has fallen in price, or if the rice crop in Java has turned out so bad that food stuffs are much more needed than manufactured goods. A spinner makes yarn from raw cotton; he will lose by his work if the wants of the community are such that no necessity exists for the conversion of any more cotton into yarn. A shipbuilder constructs a new vessel; that vessel will not pay, if freights happen to be very low; that is

to say, if the supply of ships be already very large, so that no necessity exists for providing any more. The prices of things indicate the wants of the community, and how much it is willing to pay for the satisfaction of those wants; but all prices are liable to change, and frequently an article will sell badly, although its production was determined upon when a high price was being offered for it. This is what gives rise to the risk of the *entrepreneur*. Neither the merchant nor the manufacturer stipulates in advance for a fixed remuneration for his labour. Even if the price which he is to get for his goods should be fixed before he delivers them, as in the case of many contracts, it still remains uncertain whether he will gain or lose by his venture, for the circumstances may be favourable or unfavourable to him. Risks are incurred even by the *entrepreneur* who works solely to order. To do this he must have plant and machinery, and he will probably have to keep a number of workmen in his permanent employ; all this will prove a source of loss to him if orders fail to come in.

We venture to think that the service performed by the *entrepreneur* has now been sufficiently illustrated. His service is labour—a special kind of labour, it is true, but a kind which is always attended with peculiar difficulties. Profit is the remuneration of this labour—the wage received by the *entrepreneur* for the effort and anxiety which he has undergone. We have already seen that wages and interest are included in the result of productive enterprise. Now, that which accrues to the *entrepreneur* in his own capacity forms a part of the first, not of the second, of these groups; it forms a part of wages, if we use that word in a very wide sense.

Some writers have objected to profit being called remuneration of labour, on the ground that it is frequently enjoyed by persons who have performed no labour, as, for instance, by shareholders in a joint-stock company paying high dividends. But in such cases the *entrepreneurs* get their labour done by other people, to whom they give a portion of the profit in the shape of wages or bonus or a combination of both. Speaking in a strictly scientific way, the figure which really represents the profit of a joint-stock company is altogether different from the figure usually accepted as representing that profit. It is the sum available for dividend *minus* such part of that sum as

may be regarded as consisting purely of interest on capital, but *plus* all that may accrue to the managing directors. Owing to causes which will be mentioned presently, the profits of some *entrepreneurs* are very much higher than those of others. Where this is the case, the *entrepreneur* will always be able to get his work done for him by other people and still retain some profit for himself.

Would any one object to brokerage being called wages of labour, on the ground that many brokers earn it by means of hired labour? Similarly the profits made by *entrepreneurs* are the remuneration which they receive for their efforts, notwithstanding the fact that many *entrepreneurs* manage to evade these efforts.¹

The profit of the *entrepreneur* may be regarded as consisting of three parts, viz. *compensation for risk*, *entrepreneur's wages* properly so-called, and *surplus*. These parts do not differ from one another generically; everything that the *entrepreneur* enjoys in his capacity of *entrepreneur* is profit. But there is no simpler way of explaining the inequality in the profits of different *entrepreneurs* than to examine each component part of those profits in turn, and endeavour to discover the causes which determine its amount.

§ 2

The Compensation for Entrepreneurs' Risk

Let us first consider the humblest class of *entrepreneurs*, the class to which the street hawker belongs. The boy who sells newspapers at a railway station may be an *entrepreneur*; so is the man or woman who hawks round matches, or vegetables, or fruit. We not only may, we must, call them so, since there is nothing in their occupation to distinguish it generically from that of the merchant, or the manufacturer, or the shipowner, or the agriculturist. Just as large shopkeepers buy goods and try to sell them for more than they paid for them, so do the street hawkers. In so far as the hawker is not a wage-earning worker, he incurs a certain risk, just as the greatest merchant

¹ These remarks are more especially directed against Dr. MATAJA, whose view of *entrepreneur's* profits is far too restricted.

does. He may sell much or little, and in the latter case he has to bear a loss. He enjoys, not an income, of which the amount is stipulated in advance, but a profit, of which the amount cannot be ascertained until after his goods have been sold.

In this humblest class of *entrepreneurs* are also included such workmen as employ their spare time in making things, which they afterwards try to sell. If they prosper and manage to acquire a little capital, they frequently leave their employers and emerge as small masters; we find the journeyman carpenter becoming a master carpenter, the journeyman shoemaker a master shoemaker, and in doing so he becomes more of an *entrepreneur* than he was before. He will have to procure raw materials, and in this he may be lucky or the reverse; he will probably have to take a journeyman and a lad into his service and pay them fixed wages; he will rent a little shop in which to carry on his business. All this exposes him to the risk of losing. His income is not wholly fixed in advance, but depends to a great extent upon how his business turns out.

We said just now that he becomes more of an *entrepreneur* than he was before, thereby implying that he does not quite cease to be an ordinary workman. He will, in fact, continue in many respects to be an ordinary workman. He will not confine himself to directing and superintending, or to calling upon his customers for orders; he will also execute part of these orders himself. He will often have to improve or repair things too, and these services will procure him an income which may quite properly be termed wages of labour. The income of a small master of this kind is therefore very composite; it is compounded of wages and *entrepreneur's* profit, and in many cases it is difficult to distinguish the one from the other.

Especially in towns, we find small *entrepreneurs* in great numbers; but they also form a numerous class in country districts, chiefly in parts where agriculture is carried on by small farmers or peasant proprietors. There is, accordingly, no clear line of demarcation between the workman and *entrepreneur* groups; there is, in fact, a point where the two groups become merged in each other, and where the *entrepreneur* is not to be distinguished either socially or economically from the wage-earner.

On what, then, does it depend whether there will be many or few who cross this almost invisible boundary line from either side? What are the circumstances which may prevail upon the workman to become an *entrepreneur*, or upon the small *entrepreneur* to become a simple workman, or (after having done this) to revert to his former condition? When we have answered this question, we shall have taken the first step towards explaining the laws which govern the profits of *entrepreneurs*.

Let us fancy ourselves, firstly, in the position of a workman who has for some time been contemplating a scheme for setting up in business on his own account; and secondly, in the position of a small master, who, having prospered but little, is thinking of selling his business. The reflections of both of these men will have much in common. The workman asks himself how much he will be able to earn as an *entrepreneur*; the small master, who already knows all he desires to know on this point, has formed a definite opinion on the subject of his earnings; but both institute a comparison of which the terms are—profit of *entrepreneur* and wages of labour. Should the workman conclude that, as an *entrepreneur*, he will have a smaller income than he has as a simple wage-earner, he will remain what he is; should the small *entrepreneur*, who can scarcely make ends meet, conclude that he would better himself by becoming a simple wage-earner, he will become one. Thus there is a close relation between profits of small *entrepreneurs* and rates of wages. If profits rise and wages fall, many workmen will become *entrepreneurs*; if profits fall and wages rise, the reverse will frequently happen; certainly, in the latter case, the number of small *entrepreneurs* will not increase to any appreciable extent. Thus there is, for small *entrepreneurs*, a certain minimum profit, the amount of which is indicated by the wages which, with such talents as they possess, they could earn as workmen. The small master baker may turn journeyman baker, the small master carpenter may enter the service of a large employer in his trade, the small farmer may become a labourer, the small shopkeeper a shop assistant. The income which each of these persons could earn as a workman indicates the minimum to which it is possible for his profits as an *entrepreneur* ultimately to descend.

But, as a rule, the profits will not fall quite so low as this minimum. If it were possible to earn as much in the position of a wage workman as in that of an *entrepreneur*, there would be no compensation for the risks inevitably involved in every enterprise. The minimum just spoken of has reference therefore, only to what we called the wages of the *entrepreneur*. It represents the remuneration which accrues to him for his labour and exertions, but it provides no compensation whatever for the anxieties which he has undergone, or for the risks to which his capital has been exposed. These anxieties and risks are enough to deter many a workman from becoming an *entrepreneur*. And the more powerfully they operate as deterrents, owing to their number and magnitude, the more difficult do they make it, even for those workmen who are ambitious to become *entrepreneurs*, to realise that ambition; for it requires capital in order to become an *entrepreneur*, and there is difficulty in procuring capital for an undertaking in which the chances of loss are great. Moreover, a workman who has managed to get together enough capital to enable him to set up in business for himself, will not be easily induced to risk much; a workman who is given to saving is circumspect and cautious. We may therefore assume that the lowest profits in any trade will remain, on an average, at a figure somewhat above the minimum spoken of, and that their figure will exceed that minimum in proportion as the risks incurred by *entrepreneurs* in that trade are reputed greater.

The difference between the whole profit of the *entrepreneur* and that part of it which constitutes his wages of superintendence is naturally greatest in those trades which are generally held to be attended with numerous risks. Hence everything which lessens the risks incurred by *entrepreneurs* will tend to diminish the total profits which accrue to them. In the days when the insurance system was less developed than now, trading with countries out of Europe was a business involving much risk, and those who engaged in it were exposed to much heavier losses than can possibly befall them now. There was, therefore, little temptation for small capitalists to engage in foreign trade; only large capitalists who were in a position to distribute their risks very widely could take part in it. The

profits obtained from this class of trade must therefore have been much larger in past centuries than they are at the present day; not because they included more *entrepreneurs'* wages, but because the compensation for risk was larger.

In our days, compensation for risk does not usually amount to very much; in almost every branch of business it has been reduced to a minimum which, in some cases, may even be said to be too low. This has been brought about by various causes besides the one already mentioned, as, for example, by the extension of the credit system, the stricter application and more equitable administration of laws, increasing ambition in many to raise themselves from the station in which they were born. An *entrepreneur*, unless he belong to the hawker class already referred to, is usually regarded as socially superior to a wage-earning workman, and the desire to rise, or the fear to descend in the social scale causes many to underestimate the risks attaching to an enterprise. But there is a further cause, one that has operated at all times, and with a force that shows no sign of abating, namely, the tendency in people to overestimate their own strength and abilities. A man starts in a line of business in which many others are making only a bare living, but he attributes their want of success to lack of shrewdness, or energy, or enterprise. He attempts what others have attempted times out of number, but he succeeds no better than they. We do not mean to imply by all this that compensation for risk no longer enters into the composition of profits; only that it has ceased to form a very important element in profits.

Nowadays the wages of the *entrepreneur*—for as yet we are disregarding his surplus—constitute the chief element in most profits. Owing to the causes which we have enumerated, compensation for risk is growing smaller and smaller every day. If any one wants to secure *entrepreneurs'* profit strictly so-called, he must superintend his business in person; if he pays others to do this for him, and thus abandons his opportunity of earning the wages of an *entrepreneur*, he cannot reckon upon getting more than a moderate interest on his capital. Circumstances may favour him, it is true; he may be in a position to work more cheaply than his competitors; but if he has to work under the same conditions as the least favourably

situated of these competitors, he must choose between acting as his own manager—in which case he will draw *entrepreneurs'* wages—or entrusting the management to hired persons. In the latter case, however, his profits will be insignificant, and he will have to content himself with interest on his capital.

§ 3

Entrepreneurs' Wages

We now propose to consider the causes upon which the *entrepreneurs'* wages depend. These wages are the price which he receives for the services rendered by him in his capacity of *entrepreneur*, and we know that the only normal price is that at which perfect equilibrium exists between demand and supply. In order, therefore, to discover the laws which determine the point of equilibrium between demand and supply in the matter of *entrepreneurs'* services, we must consider each in succession.

I. The demand for the services of *entrepreneurs* depends, in the first place, upon the number of the population; thus a much larger number of *entrepreneurs* will be needed in a large town than in a small one. It also depends upon the material welfare of the population; where there is much poverty, merchants, shopkeepers, and manufacturers will have very little to do. An important influence upon the demand for *entrepreneurs'* services of a particular kind, that is to say, for the services of merchants capable of conducting foreign trade, is exercised by the question, whether or not a country yields much produce of a kind suitable for exportation; if this be the case, there will be a need for persons prepared to undertake this export trade. As improving the means of communication and reducing the duties on imported goods greatly stimulate international trade, we may conclude that they have an equally stimulating effect upon the demand for the services of merchants and shipowners. When England abolished her Corn Laws, reduced her duties on foreign manufactures, and remodelled her Merchant Shipping Laws; when the other countries of Europe gradually followed her example by extending the application of free-trade principles, not only was the

general welfare advanced by these measures, but a new field was also opened up to the *entrepreneurs*, whose services were thenceforward needed for the purpose of exporting and importing numbers of articles previously outside the field of international trade.

It must be observed, however, that, through the extension of the system of producing on a large scale, *entrepreneurs*, whose services were formerly indispensable, are being gradually rendered superfluous. But there is another tendency discernible in various departments and operating even more strongly in the same direction; we find producers and consumers coming as closely as possible into touch with one another, and middlemen being reduced to the smallest possible number. It cannot be denied that, owing to these causes, the relative share of the whole body of *entrepreneurs* in the aggregate income of the community is steadily tending to become smaller, since it becomes more and more possible to dispense with their services. The interests of the *entrepreneur* class are not in all respects identical with those of the community, as we shall have plenty of opportunities of showing later on.

With regard to the demand for the services of *entrepreneurs*, it is further to be noted that a need exists, not only for different classes of *entrepreneurs*, but also for a variety of groups within each class. A poor man prefers to buy his furniture in an unpretentious warehouse; a wealthy man likes to be received by a well-dressed individual in a smart shop, situated in a fashionable quarter. But rich and poor have this in common, that, in the matter of goods of which fresh supplies have to be procured from day to day, both prefer to deal with tradesmen in their immediate neighbourhood. This explains the necessity for the great multitude of small shops to be seen, more especially in large towns. In buying goods which we require only occasionally, we go wherever they are to be had of the best quality at the lowest price; but the butcher, the baker, the greengrocer must live in the neighbourhood. A manufacturing baker who desires to sell large quantities of bread must establish dépôts in every quarter of the town; were he to neglect to do so, his sales would be small. This accounts for the fact that, even in densely populated towns, there are

not very many large stores for the sale of articles of daily consumption.

II. Let us now consider the supply of *entrepreneurs* services; this supply depends upon the causes which determine the supply of services of every description. *Entrepreneurs'* wages are remuneration for labour, and whoever works for his living demands a normal remuneration for his labour. Not all perhaps, but certainly most of us, are in a position to choose between two ways of working; we may work on our own account, or we may work for another; in the former case the remuneration which accrues to us for our effort is termed profit; in the latter, it is termed wages or salary. What determines our choice? In this matter all kinds of motives may operate, such as ambition, love of ease, a taste or a distaste for a particular occupation; but so long as these various motives cause as many people to decide upon the one course as upon the other, the choice will be finally determined by the consideration of the probability of advantage. The person who draws *entrepreneurs'* wages must not on an average, earn less than the person working with equal strength and natural abilities for other people. Failing this the supply of *entrepreneurs'* services will ultimately diminish to a point at which the remuneration for both kinds of service will be equal.

This has already been partly demonstrated. We have seen that there is a minimum profit, at which the supply of the most inferior kind of *entrepreneurs'* services ceases altogether to be forthcoming, and that this minimum is determined by the income which a small master or shopkeeper would be able to earn as a wage worker. But this applies to all *entrepreneurs'* services. The man who possesses a knowledge of commerce may become a merchant, but also a broker or an agent, or, if necessary, an accountant or a chief clerk; the man who has technical knowledge may become a manufacturer, but also a manager of a factory, or an engineer; a person who understands banking may become a banker, if he is rich enough, but he may also become manager or assistant-manager of a bank. In short, there is nobody nowadays, possessing aptitude for any branch of work, who could not earn a certain wage or salary in the service of

others. The person in business on his own account compares his income with that wage or salary, while the person receiving a wage or a salary compares his income with the profits of those whom he regards as no more than his equals in rank or ability. The result of this comparison determines whether or not many persons employed for wages or salary will become *entrepreneurs*.

It is more especially in cases where people have to choose a profession that they make a very careful comparison between profits and fixed stipends. A young man has completed his studies at a technical training college, and has a chance of being taken into a manufacturing concern, with the prospect of speedily attaining a partnership; but he has also the offer of an appointment as engineer to a railway company. After reflecting for a long time, he forms his decision. But in what can his reflections have consisted, if not in making an exact comparison between profits and wages; and what influenced his decision if not the magnitude of the income which he expected to derive from the manufacturing concern as compared with the salary which he would receive as engineer to the railway company? Or to take another illustration. A man who has had a commercial training is about to establish himself in business. He has sufficient capital to enable him to set up for himself on a modest scale, but he hesitates, owing to the poor returns which others are getting in the trade. Somebody now offers him a situation as correspondent in a large counting-house. Will he accept the appointment? Not before he has made a comparison between the income which it can yield him and that which, according to his estimate, he would be able to make as a merchant; and in making this comparison he will take due account of the risks of an *entrepreneur*. Thus *entrepreneurs'* wages cannot, in the long-run, and on the average, be lower than the wages for other labour entailing the same amount of trouble and effort, and requiring the same personal qualifications.

They cannot be lower, but neither can they be much higher; the minimum here is also the maximum. For, the result of the comparison which determines whether many *entrepreneurs* shall become wage or salary earners, also determines whether many shall pass out of the latter into the former

status. If *entrepreneurs'* wages be much higher than wages paid for the same quality of labour performed in the service of others, the supply of *entrepreneurs'* services must become much more plentiful. A person desirous of setting up in business on his own account frequently has difficulty in obtaining the needful capital, and this difficulty has a tendency to restrict competition in certain trades; on the other hand, many people have too high an opinion of their abilities, or are too hopeful of the future, and this tends to increase competition. We can give instances of trades in which even the least favourably situated *entrepreneur* earns more than the man who is his equal in social rank and ability, but who works for wages or salary; but it would be equally easy to give instances of the reverse. How many a merchant would accept a situation as bookkeeper or correspondent if his sense of pride would only permit him!

It depends entirely upon the extent to which a need exists for the services of *entrepreneurs*, how much of those services will be demanded at the minimum rate of remuneration; but so long as the profit to be obtained, over and above compensation for risk, exceeds that rate of remuneration, the supply of *entrepreneurs'* services will not be deficient. We must not, however, lose sight of the fact that that rate of remuneration may itself rise or fall. It will rise if rates of wages and salaries obtainable in the service of others go up, and it will fall if they go down. For, if the wages and salaries obtainable in the service of others were to rise while *entrepreneurs'* wages remained stationary, the status of *entrepreneur* would lose its attraction for many; and the reverse would happen if they went down while *entrepreneurs'* wages remained the same. It follows, therefore, that the wages of *entrepreneurs* are governed by the same laws as wages in general.

It may be as well to add here, that a distinction has to be made between the profits which a merchant or manufacturer realises in a given period of time and those which he realises on a given article. The latter may be great while the former are small; in the same way the profit on each transaction may be slight while the total profits for the year may be very large. There is nothing puzzling in this if we reflect that the number of transactions may be large or small; the smaller

the number, the larger the profit which the *entrepreneur* will have to make on each. Large sales may be made at a small profit, or small sales at a large profit per unit, and the result may be the same in both cases. This leads us to a further observation which is of some importance. There frequently exists among shopkeepers a tacit agreement with reference to the profit which they must realise on a given quantity in order to secure a reasonable minimum of income. We may, as a rule, be certain—and we owe it to free competition—that, in the long-run, the aggregate *entrepreneurs'* wages of a shopkeeper will not exceed this minimum. What some receive in excess of that figure is *entrepreneurs'* surplus, of which we shall have more to say presently. What we cannot be quite sure of is, that shopkeepers will always fix their prices in such manner as shall best accord with their own interests as well as with those of the public. For all we know, they might sometimes earn just as much—even more, while competition did not become keener—if they fixed the amount of the profit to be made on a given quantity at a lower figure. A person seldom sets up for himself as a shopkeeper without having previously served as a shop assistant; that is, without having passed a number of years in an environment where he was subject to the influence of the ideas of people who had long been themselves engaged in business such as he is about to start. These ideas sometimes embody the results of careful observation, but they are frequently tainted with pettiness and ignorance; it is not at all unlikely that those who follow them blindly sometimes find themselves on the wrong track. So long as there is nothing to compel a man to revise his ideas, he is in danger of neglecting to do so, and shopkeepers do not as a rule belong to the class which is least subject to the influence of precedent. We do not mean to imply that the complaints frequently made of the high prices charged by shopkeepers are always justifiable; but neither do we intend that the theory here set forth should be invoked in support of a contention that they are unjustifiable. The total *entrepreneurs'* wages of a shopkeeper may be very moderate, even though it should be possible for the profit which he makes on each article to be reduced considerably without causing him any loss.

§ 4

Entrepreneurs' Surplus

What has already been said only partly enables us to account for the great inequality which we find in the profits of different *entrepreneurs*. Many profits contain an ingredient to which we have not hitherto given our attention, viz. *entrepreneurs'* surplus, or, as it has been called by some, *entrepreneurs'* rent.¹

Profit consists, in part, of compensation for risk; and as risks may differ very much, we have here at once a source of inequality. It also consists, in part, of *entrepreneurs'* wages, that is to say, of remuneration accruing to the *entrepreneur* for his labour; and as all do not perform the same kind of labour, we need not be surprised if one *entrepreneur* gets more profit than another. The industrious workman gets higher wages than the sluggard, the competent clerk is paid more than the incompetent; it is quite reasonable therefore that the books of a hard-working and capable *entrepreneur* should show a larger balance of profit at the end of the year than those of his less industrious and less capable competitors. We are therefore able to account for a good deal of the inequality in profits when we consider two of the components of profit, viz. compensation for risk and wages of *entrepreneur*. But we cannot account in this manner for the whole of the inequality. There are numberless instances of employers who work as hard and as well as others and yet earn a great deal less.

For, the circumstances under which work is performed are not the same for everybody. One man carries on an old, well-established business; another has had to work up all his connection himself. One trades under a name that commands general confidence; another, though equally trustworthy, is quite unknown. One has a large capital, and is therefore able to work at a minimum cost; another has less capital, and is therefore unable to procure the best machinery and to adopt the best system of division of labour. Two persons each

¹ See more especially Dr. H. von MANGOLDT's excellent little work, *Die Lehre vom Unternehmervergewinn*, Leipzig, 1855.

start a shop, and at the outset there is no apparent reason why their profits should be unequal; nevertheless, one of them makes a fortune and the other becomes poor. For, just as one of the shops had been opened something or other happened which rendered its situation very favourable, while the neighbourhood in which the other man started became unpopular. It is quite possible that the man who became poor worked the harder of the two.

Whatever an *entrepreneur* earns in excess of what is earned by the least favourably situated of his competitors, or, to express it more correctly, all that he earns in excess of his wages as *entrepreneur* and his compensation for risk, is *entrepreneurs' surplus*. This surplus has frequently been likened to the rent of land; it cannot be denied that there are many points of resemblance between them. Just as good land yields more than bad, if equal quantities of capital and labour be applied to both, so also does the manufacturer who works under very favourable circumstances obtain, for the same outlay, more products than another who has not the same advantages. But there is also dissimilarity between the rent of land and the surplus of the *entrepreneur*; for the former must always increase as the population increases, while this can by no means be said of the latter. The greater the surplus of *entrepreneurs*, the greater the possibility of its disappearing altogether. For instance, a manufacturer is making exceptional profits owing to the fact that he is working with a large capital; the smaller manufacturers will now make every possible effort to acquire as large a capital as their fortunate competitor, and in so far as they succeed in doing so, his profits will become smaller. Owing to its favourable situation, a shop enjoys a very large custom; the other shopkeepers will now do all in their power to increase their sales; perhaps they will content themselves with a smaller profit. A merchant or a banker has a first-class connection, so that he manages to earn a large income without any great effort. Others will now endeavour to spoil his connection, and we know to what means they are capable of resorting in order to do so. The landowner need have no concern beyond seeing that his land is kept in good condition; but grievous disappointment would await any *entre-*

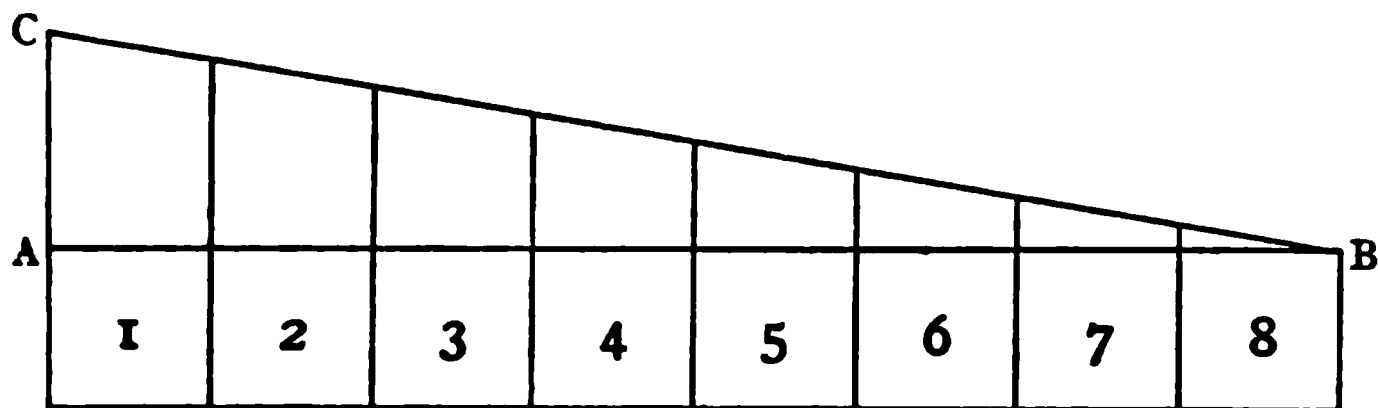
preneur who failed to keep pace with the times and felt assured that his surplus would not diminish. Thus *entrepreneurs'* surplus, though having much in common with the rent of land, is not altogether governed by the same laws.

No doubt all who engage in business endeavour to secure *entrepreneurs'* surplus, and in so far as the means employed to this end are honourable, the result for mankind is very fortunate. But these honourable means consist in endeavouring to minimise the exertion involved in production and to supply the best goods at the lowest possible price. Suppose there were no longer such a thing as *entrepreneurs'* surplus; suppose, for example, that those who secured it had to hand it over to the State: what incentive would remain for people to adopt improved methods of applying capital and labour, or to establish new commercial relations? The abolition of this surplus would no doubt help towards effecting a more uniform distribution of the social income, but its effect on production would be most adverse. The same must be said of a very large number of other measures which would have an equally favourable effect upon the distribution of income, a circumstance which is only too frequently forgotten. People often imagine that they have adduced a conclusive argument in favour of a proposed social reform, when they have been able to show that its adoption would remove much of the inequality which characterises the distribution of wealth. As if this were the sole object with which we need concern ourselves!

Is it conceivable that, in a given branch of industry, every *entrepreneur* will secure surplus? The most inferior land, as we know, yields no rent; are not enterprises which enjoy no economic advantages to be compared with the least fertile of the cultivated lands, and must we not conclude that those who own such enterprises are unable to obtain any surplus whatever? As a rule, yes; the merchant, shopkeeper, or manufacturer who works under circumstances which give him no advantage over his competitors must, as a rule, content himself with compensation for his risk and remuneration for his labour. The income of numberless small *entrepreneurs*, who are lacking neither in skill nor ability, scarcely amounts to that of foremen in the same trade. How many find the greatest difficulty in holding their own in the struggle for

existence, either because they have too little capital or because they have other drawbacks to contend with !

The products of the various enterprises in a given branch of industry may in most cases be represented as in the following diagram :—



The whole of the space included within the diagram represents the total sum realised on the products of a given branch of industry. All below the line AB compensates the *entrepreneur* for the wages and interest which he has had to pay ; all above that line is profit. The profit diminishes for each of the spaces into which the area is divided, according as we approach the marginal point B. In space 1 it is very large, in space 8 it amounts to scarcely anything. Branches of industry in which the condition of things corresponds to that set forth in the above diagram are incapable of extension, unless the effort involved in production be diminished or the demand for the product increased. For, if the supply be increased, the price of the product will fall, and will thus diminish the gross amount realised ; we might illustrate this by supposing the line CB in the diagram to fall somewhat lower down. But if this line were to fall lower down, the position of the *entrepreneurs* in space 8—those having no economic advantages—would be rendered impossible ; they would become losers instead of gainers. Similarly, it would be impossible for wages and interest to keep constantly rising in the same branch of industry ; for this would make it necessary for the line AB to move higher up, the result of which would be the same as that of bringing the line CB lower down. In short, in industries of this kind, the profits of *entrepreneurs* who enjoy no economic advantages are exceedingly small ; the slightest

drop in prices or rise in wages and interest suffices to reduce their profits to nil.

Such is the condition of things in most branches of enterprise. Owing to the keen competition prevailing all around, production is generally continued to the utmost point at which it is capable of yielding any profit. So long as a normal profit is to be got in any direction, people are generally to be met with who want to secure that profit. How often, in fact, do we not find the utmost limits of profitable production being overstepped!¹ Many undertakings are established upon the ruins of others, of which the buildings and machinery have been purchased for less than they cost. And so strong and so general a thing is attachment to long-established custom, that many people will continue to carry on a business even though it should scarcely compensate them any longer for their trouble, or yield them interest on the capital which they have invested in it. Numberless instances of this are to be met with, as we have already noted, in expiring industries, or in industries in which the small man is being ousted by the large capitalist.

Nevertheless, we should be going too far, were we to give an absolutely negative answer to the question stated above; for, it is not altogether inconceivable that the whole of the *entrepreneurs* engaged in a particular branch of industry should be able to secure a certain amount of surplus. In the first place, they may have a monopoly. In no European country, for example, is everybody at liberty to start a bank of issue; hence few such banks in Europe are debarred the opportunity of earning *entrepreneurs'* surplus. In the second place, it is possible that the advantages obtainable in a given branch of industry are not well enough known to attract a sufficient number of competitors. How can we be sure that there are not still certain industries in which more than normal profits are being made? The people who are making these profits would be the last to give publicity to the

¹ According to LEROY-BEAULIEU (*Essai sur la Répartition des Richesses*), from five to six thousand out of a total of a million and a half persons holding trading licences fail in business every year. Assuming, says this author, that every business lasts, on an average, 20 years, it follows that from 8 to 10 per cent. of all businesses fail (see second edition, p. 304).

fact. Finally, when an industry is in process of rapid development, it is not only conceivable, it is inevitable, that the whole of the *entrepreneurs* engaged in it should be able to obtain surplus, if only for a short time. Let us refer once more to the diagram on p. 251, and imagine the line CB to have been raised considerably owing to an advance in prices. The result would be that the producers coming within space 8, who had previously to be content with scanty *entrepreneurs'* wages, and a barely adequate compensation for risk, would now be able to secure surplus. This would probably not last long, as production would soon be increased; room would have to be made in the diagram for a ninth or even a tenth space, so that the line CB, after having been moved up, would have to fall back again, with the result that those who were then enjoying no economic advantages would be deprived of the possibility of securing surplus. But, for a time at any rate, surplus would have accrued to every *entrepreneur* who was seeking a livelihood in that particular branch of industry.

Some little way back we drew a comparison between *entrepreneurs'* surplus and rent of land; there is this further point of resemblance between these two, that both admit of being capitalised. In order to be able to acquire an annual income from the possession of land, people are quite willing to pay a certain sum; hence good and well-situated land always possesses a value. Similarly, people are quite willing to pay a certain sum with the object of receiving an annual *entrepreneurs'* surplus; hence a "goodwill" frequently possesses value. The owner of a shop enjoying good custom, for example, upon retiring often succeeds in disposing of his business at a price which includes more than the value of the goods taken over by the purchaser; the excess consists of capitalised *entrepreneurs'* surplus. The purchaser counts upon this surplus accruing to him with the business. He deems it more advantageous to purchase a going concern at a sacrifice of a certain amount of capital than to start a shop in another quarter. In the same way, many an agriculturist prefers to pay a high price for land than to settle on a tract which he could get for a nominal price.

There is yet another point of resemblance between rent and

entrepreneurs' surplus. A landowner, by improving his land can make it yield more rent; similarly an *entrepreneur*, by performing a judicious act at a given moment, can sometimes secure a lasting surplus for himself and for those who come after him. A son frequently reaps advantage from the wisdom which his father displayed in starting a shop at a particular spot, or building a factory in a particular locality where it had the best chance of succeeding. And just as it is in the power of the landowner to add considerably to the value of his land by managing it judiciously, so is it in the power of the *entrepreneur* to manage his business in such a way as to procure a good name for it and thereby increase its value. The special advantages which he himself will reap from this can only be regarded as extra *entrepreneurs'* wages but the fruits which his successors will gather as the result of his care and industry will be *entrepreneurs'* surplus. Thus it will be seen that this surplus is not merely the result of chance, but frequently has its origin in man's activity and forethought.

By way of completing the comparison between the rent of land and *entrepreneurs'* surplus, we would point out that neither the one nor the other can have any influence upon the prices of goods. Once a person has taken over a business and paid a certain sum for the right to carry it on, he will never be able to recoup himself out of others for the interest on that sum. Should he be disappointed, should the business fail to yield this interest over and above the ordinary profits obtained in other businesses of the same kind, only one result is possible, namely, that he himself will sustain a loss, not that his enterprise will cease to be carried on. It is quite possible that he himself will give it up; but it will at once be taken over by some one else. Nor can the prices of goods be affected by the taxation of *entrepreneurs'* surplus, any more than the prices of agricultural produce can be increased by the taxation of land, provided the tax be confined to the rent of the land. The taxation of *entrepreneurs'* surplus diminishes the gains of those upon whom it is imposed, and beyond this it has no effects whatever.

What has been said in the present section should suffice to clear up whatever was left unexplained in the previous

sections with regard to inequality in the profits of *entrepreneurs*. Where, as a rule, more than ordinary profits are being made, it is because exceptional dangers are being faced with success, or exceptional talents and attainments are being displayed in conjunction with great industry and care, or finally, because advantage is being taken of circumstances more favourable than those in which the majority of the *entrepreneurs* in the same branch of industry are placed. It is not always easy to determine which of these three causes has contributed most towards the profits of a given individual; but if we regard *entrepreneurs'* profits in the aggregate, as an item of the nation's income, we see at once that they consist primarily of the wages of *entrepreneurs*; compensation for risk counts for but little, and a large share of the surplus arising out of favourable circumstances can only accrue to a minority, as the very favourably situated ones can never form a very large number. Remuneration for labour therefore remains as the chief ingredient in *entrepreneurs'* profits.

The question has frequently arisen, whether the theory of profits ought not to be treated as a branch of the theory of wages; indeed, there are good reasons why it should be so treated. There is no fundamental difference between labour performed for profit and labour performed for a wage; both imply the performance of services entailing the exercise of personal powers and talents. The main reason why the subject of profit requires to be treated separately is that profit consists not only of the wages of *entrepreneurs*, but also of the two other ingredients which we have described.

CHAPTER VI

THE WAGES OF LABOUR

§ 1

General Laws which determine Wages

WHEN we were investigating the causes which determine the rate of interest, we began by inquiring from which part of the nation's income the capitalist derived his interest: we found that he derived it from that part which remained after the landowners had secured their rent and the *entrepreneurs* their profit.

It will probably be found possible to view this statement in a clearer light after the distinction made in the preceding chapter between the elements of which the profit of *entrepreneurs* is made up, and more especially after the explanation there given of the origin of *entrepreneurs'* surplus. The diagram on p. 251 had reference to the product realised in a given branch of industry, but it may also be used for showing in a general way how the product realised by the whole community is apportioned between landowners and *entrepreneurs* on the one part, and the remaining contributors towards that product on the other. All above the line AB is rent of land or surplus of *entrepreneur*; interest on capital properly so called is only to be found in the part below that line. This interest must drop to the point at which the demand suffices to cover the whole available supply, and this condition is one which can only be fulfilled if the capitalist be content to accept his share out of the income remaining over after those enjoying economic advantages have

secured the gains which accrue to them in virtue of those advantages.

What has just been said of interest applies equally to the wages of labour. The sum which it will be possible for the *entrepreneur* to pay in wages of labour is limited by the advantages which he derives from that labour. An agriculturist who, by his own unaided efforts, can make his land yield 40 measures of produce per acre per annum, calculates that by permanently employing a labourer he will be able to increase the yield to 100 measures per acre. The difference between the two yields is 60 measures; therefore the sum realised by the sale of that quantity of produce must more than suffice to pay the labourer's wages in order to make it worth the farmer's while to employ him. A manufacturer estimates that by employing another 100 men he will be able to obtain products to the value of £7,000—after deducting the cost of the raw material and other necessities,—or £70 per man. Out of this £70, allowance must be made for interest, and for depreciation of machinery through wear and tear, and the manufacturer must also get a profit out of it, otherwise there will be no inducement for him to increase the scale of his operations. Thus the wages per man will have to be less than £70.

These examples show us roughly how wages are regulated, but they do not enlighten us as to what will take place if the incomes which it is possible for *entrepreneurs* to make by employing labour are different. We know that they must be different. The same labourer who can only obtain a small quantity of agricultural produce from poor soil will be able to obtain a very much larger quantity if he be allowed to work on very fertile soil; and similar differences are to be found in industrial enterprises. What regulates wages, what determines their maximum? Is it the highest, or is it the lowest advantages which *entrepreneurs* are able to derive from the labour of the worker? It will be seen that the question is the same as was asked in connection with interest; and the answer is the same. In every industry, wages must fall to the point at which there will be demand for the labour of all who are seeking employment. It will be well to note that we do not speak here of the labour of all existing labourers,

but of all who are seeking employment; the importance of this distinction will appear later on. The main thing at present is, that the general law which governs the phenomena of value is recognised as governing wages as well. The value of services depends on their marginal utility. That is to say, the value of services in production depends on their utility upon what was spoken of in a previous chapter as the "economic margin of production."¹ Upon that margin neither rent nor *entrepreneurs'* surplus is secured, only interest and wages (of labour and of *entrepreneur*). And just as is the rate of interest, so also is the rate of wages determined on that margin; by rate of wages is here meant the rate which the workmen will be able to command. It will be impossible to depress wages below that level without bringing about an abnormal condition of things. This was fully discussed in § 7 of the chapter on interest, and it will therefore be sufficient to refer the reader to the demonstration there given.

We have seen that a very close connection exists between interest and wages, and in many cases they rise owing to the same causes. Everything that has the effect of increasing the aggregate of incomes on the economic margin of production, in so far as it makes no change in the relative demand for capital and for labour, is beneficial to both. The interests of capital and labour are, therefore, in many respects the same. But in certain respects they conflict. For instance, it must suit the capitalist best when there are few, and the workman when there are many people seeking to invest their capital; it means gain for the capitalist, but is entirely to the disadvantage of the workman, for the State to contract large loans for unproductive purposes; the capitalist, in so far as he considers his own interests alone, has reason to be glad when he finds that there is a demand for goods in the production of which much capital has to be employed, or when technical improvements are achieved, the chief excellence of which consists in the saving of labour, or when the growth of population increases the need for capital in a variety of ways; the interests of the workman, on the other hand, are best served by a demand for goods in the production of which labour is

¹ Cf. *ante*, pp. 217-219.

the principal factor, by technical improvements the chief excellence of which consists in the saving of capital, and by a slow growth of population.

In the foregoing we have given a rough sketch of the wage theory, and we wish it to be regarded as a sketch only, not as an attempt to justify the existing social order. When we are told that interest must fall to the level at which there will be demand for all the capital offered for investment, we feel in no way affected by this information; but when we are told that wages must fall to the level at which there will be demand for the labour of all who are seeking employment, so that the special gains arising out of the fertility and good situation of land, or out of the favourable conditions under which an industry is carried on, accrue to the advantage of people other than the workers, the impression is quite different. We are inclined to think that we discern a defect in the social structure; nor do we err in thinking so. We should err, however, if we failed to take into consideration certain circumstances which must not be overlooked in this connection.

In the first place, the worker is not wholly excluded from a share in the special gains referred to. In many cases an *entrepreneur* who makes large profits benefits his workmen by erecting good and cheap dwellings, by establishing pension and similar funds, or by instituting a profit-sharing scheme. There is nothing in the law of supply and demand to impel him to do any of these things, but there is in public opinion, which will not brook the setting up of commercial principles as the sole guide for regulating the relations between employers and workpeople. Many beneficent results have been brought about by the influence of those who, by precept or example, have so moulded public opinion that no *entrepreneur* who makes large profits can, without incurring odium, refuse to allow his people to share in some way in his success. The law of wages, of which the rough outline has just been traced, neither enjoins nor forbids; it simply shows how the value in exchange of labour is regulated; it certainly finds no fault with any one for rewarding labour on a more liberal scale. Just as there is nothing in the law of rent to prevent a landowner letting his land at a low figure,

so also is there nothing in the law of wages to prevent the remuneration of labour being regulated according to principles involving a more lofty aim on the part of the *entrepreneur* than that of getting a maximum of service for a minimum of money.

In the second place, we would recall what was stated in the last chapter as to the impetus given to industry by *entrepreneurs'* surplus, the wholesome effect of which can hardly be overestimated. In countries or districts where the people are lacking in enterprise, too little use is made of the existing natural advantages. Goods, which could be produced at a low price at home, are imported at a high price from abroad. Agriculture and industry are confined to beaten tracks, there is neither progress nor development. Wages are low, and they would be lower still if many labourers did not leave the district temporarily, or for good. Conditions like these enable us to see how important it is for a country to possess a class of intrepid *entrepreneurs*. But such a class does not emerge in places where no special gains are to be secured; any more than land improvements would be carried out if they did not enable the land to yield more rent.

In the third place, it must be remembered that, if *entrepreneurs* have a chance of earning surplus, they are also liable to incur losses, and that falling rents and prices, as well as rising rents, come within the experience of landowners. The law of supply and demand gives the workers no right to claim a share in the special gains of the *entrepreneur*, but neither does it oblige them to bear a share of the losses which he has to sustain, and these may be enormous. In the diagram on p. 251 it was necessary, for the sake of clearness, to assign a large amount of space to *entrepreneurs'* surplus. But if the diagram had been intended to illustrate the aggregate product of all enterprises in a period of some duration, its shape would have had to be altogether different. If the balance of profits, after deducting losses, were very large, capital would increase much more rapidly than it does at present. It would be impossible, for instance, to account for the fact that in Holland in 1894 only 115 persons possessed property of 2,000,000 florins (£166,667) and upwards,

and that only 1,309 possessed property of 500,000 florins (£41,700) and upwards.¹

Lastly, though it is only under certain conditions that economic laws, like physical laws, can bring about certain results, yet in many cases it is in man's power to alter these conditions. There is a law of gravitation; but it does not follow from that law that every one who climbs a mountain must fall; it is important for man to be acquainted with physical laws, if only because, by knowing them, he is enabled to see what he must or must not do. It is the same in the domain of economics. The necessities imposed by economic laws are also purely conditional. Growth of population of itself tends to necessitate production with continuously diminishing returns, and thus to increase the rents of landowners and the surpluses of *entrepreneurs*. Unless some counteracting influence were at work, we should find that, as population increased, the individual's share of the nation's income grew gradually less, and, moreover, that the proportion in which labour shared in that income became smaller and smaller. Does it follow from this that the remuneration of labour must of necessity diminish? To think that it must, would show an entirely wrong conception of the economic law with which we are now concerned.

For there is no reason whatever for regarding constant increase of population, strictly so called, as inevitable. In France the population has been almost stationary for some years, a fact chiefly due to a decrease in the number of births.² What has happened in France may happen elsewhere. There is no economic law, nor indeed is there any physiological law, in virtue of which the number of births must of necessity, year by year, exceed the number of deaths.

Moreover, there is no reason for doubting that progress will be made in agriculture and industry. The maximum wage which the worker will be able to obtain depends upon

¹ It is also worth noting that, out of a total of 224,594 persons assessed for taxes on business and professional incomes in the fiscal year 1894-95, no fewer than 214,005 were assessed for incomes of less than 3,500 florins (say £292).

² From 1883 to 1887 the births averaged 922,486 per annum; from 1888 to 1892, 864,700 per annum; in the same period the deaths rose only from 847,968 to 852,415 per annum on an average. While, therefore, the yearly decrease of births was 57,786, the yearly increase of deaths was 4,447.

the value of his services on the margin of production; but the results obtainable from production on that margin admit of being increased. Inventions may increase the productive power of capital and labour. The services of the workman may become more valuable because of his having acquired more skill and knowledge, or because he is better fed, or because his moral standard has been raised. Improvement of the means of communication and the removal of artificial barriers may bring about the same result. To any one who objects that all these things may have no other result than that of increasing the rate of interest, our answer is, that this is inconceivable, if we assume a population which is either stationary, or increasing less rapidly than capital; in either of these cases there is reason to expect that much capital will be created, since the causes mentioned will have operated, if not on the whole field of production, at least on a large part of it, and will thus have had the effect of increasing many profits during the time that wages remained unchanged. In the struggle between capital and labour, the numerically superior party is the weaker; everything that tends to the advantage of the capitalist, therefore, operates in the future to his disadvantage,—in so far, that is to say, as he does not spend the whole of his additional income.

Man is no more at the mercy of economic laws than he is at the mercy of physical laws. He must respect both; but he is able, at times, to prevent the conditions under which they operate from arising. On the other hand, his interest will sometimes prompt him to aid the fulfilment of those very conditions, because the operation of the law will bring him advantage.

The conclusion to be drawn from all this is as follows: The wages of labour cannot, in the long-run, be lower than the value in exchange of the labour, and this value in exchange is governed by four causes. Firstly, by the population: the smaller the population, the greater the value of labour, for then there will be less necessity for producing under unfavourable conditions. Secondly, by the returns obtained by the co-operation of capital and labour in general: increase of these returns has in most cases the same effect as decrease of population. Thirdly, by the returns which capital and

labour obtain on the economic margin of production: the greater these are in proportion to those obtained at other points, the smaller will be the amounts accruing to land-owners in the form of rent, and to *entrepreneurs* in the form of surplus. Fourthly, by the quantity of capital seeking investment in productive enterprise.

Such are the conclusions to which we are led by the process of reasoning, with respect to the main features of the wages theory; and these conclusions have been amply verified by experience. The favourable effects of a small population are discernible in the United States, South Africa, and Australia, where wages are high. Wherever labour, supported by growth of capital and directed by capable *entrepreneurs*, has acquired increased efficiency, its remuneration has increased. And the great abundance in which capital has been forthcoming in the course of the nineteenth century has been a cause of development in the means of communication, in reclaiming land, in intensive cultivation, and in manufacturing enterprise, and this development has greatly diminished the volume of poverty. Rent has fallen and real wages have risen. Everything, that the results of theoretical inquiry would lead us to expect, has actually come about. But all along we have been able to note that, concurrently with the causes which were operating favourably upon wages, another and a potent cause was operating in the contrary direction. It is the cause, to which repeated reference has been made in these pages, and the significance of which has been pointed out—though in vain—by MALTHUS in his *Essay on Population*.

The theory of wages as here set forth does not, however, meet with general acceptance. Some dispute it as fundamentally wrong; others, and these are the majority, do not dispute it; they form opinions ostensibly based on, but really in conflict with it. We will deal first with the fundamental objections, but only in so far as they do not touch upon the relation of wages to population, or upon the effect of high import duties on wages, as we intend dealing with both of these subjects later on. We will then endeavour to prove the erroneousness of certain very widely entertained ideas regarding causes which operate favourably upon wages. Occasion will, at the same time, be found for elucidating certain truths

with which it was impossible to deal adequately in the foregoing general review of the wages theory.

§ 2

Wages and Strikes

In 1869 appeared Mr. W. T. THORNTON's book, *On Labour*, in which certain doctrines, generally accepted at the time, were subjected to severe criticism. At that time JEVONS had not yet written his *Theory of Political Economy*, nor MENGER his *Grundsätze*, so that the theory of value was still to a great extent undeveloped. There were people still who believed in what was known as the "Wage-fund Theory," though others had already begun to dispute it. According to this theory, wages—whether daily, weekly, or annual was not clearly stated—were supposed to be determined by the ratio existing between the amount of capital employed in production and the number of workpeople seeking employment. A man like THORNTON could hardly find it difficult to point out errors in the doctrines which he was opposing, and he succeeded in doing so. But he did not confine himself to criticising; he also formulated independent opinions, the most important among them being, that wages depend, to a large extent, upon the efficacy with which workers are able to assert their interests in the face of employers—upon the strength of their organisation, in fact. THORNTON summed up the chief argument which he adduced in support of this opinion in the words: "labour will not keep." What he meant by these words was this. The merchant or the manufacturer can store up his goods; if he thinks that prices are too low, he can wait until they improve. But labour cannot be stored up. If the worker fails to utilise his time, his working power is temporarily latent. His condition is that of a man who must sell his goods at whatever price they will fetch; but with him this condition is not transient, not exceptional, but normal. Here we see the utility of trade unions. By strikes, or threats to strike, they are able to keep up the price of labour, they are able to coerce

employers into paying rates of wages higher than those determined by the law of supply and demand.

Such is THORNTON'S theory. Before pointing out its errors, we will draw attention to three truths which the consideration of this theory will enable us to recognise. All of them are implied in what has just been said with respect to the causes which influence wages, but they are not so clearly implied as to render it unnecessary that they should be expressed.

Firstly. Wages are, to a great extent, determined by the productive power with which capital and labour co-operate; but in some cases the increasing of wages may, itself, increase this productive power. We are not thinking just now of the effect of wages on the quality and quantity of labour; this is a difficult point, and we shall speak of it presently. We are thinking of the *vis inertiae*, the power of fixed routine, which preserves what is good, but also retards its introduction. Increases of wages, extorted by combination among working men, do not always produce an abnormal condition of things; they are sometimes the incentive for improvements, which otherwise would not have been introduced. What do we learn from the history of protection? That, as a rule, protected industries do not thrive. What does the history of excise legislation teach us? That manufacturers have always displayed incredible ingenuity in turning new excise regulations to their own advantage. The history of factory legislation, too, is instructive. How often have we not found men of practical experience declaring that the restriction of the employer's liberty of action in respect to dealings with his operatives would certainly end in the ruin of manufacturers! All the same, the manufacturers have managed somehow to adapt themselves to the altered conditions. ✓

It is difficult to determine how far increases of wages, if extorted by the workpeople, may have the same effect upon the ingenuity of *entrepreneurs* as that which has been so frequently found to result from measures involving the withdrawal of protection, the regulation of excise duties, or factory legislation. There are branches of industry in which there may almost be said to be fixed periods of great depression. The ingenuity of the *entrepreneurs* is then so taxed by the course of prices, that very little additional stimulus

can result from the extortion of increased wages by the workers. In such trades, moreover, strikes are most numerous at the beginning of the depression. Their object then is, not to obtain increases, but to resist reductions of wages, an object which they seldom attain. But there are other trades, which are always in a condition of moderate prosperity. Fortunes are neither made nor lost in these trades. Periods of extraordinary prosperity are as rare as periods of great decadence. There is plenty of competition, indeed, but it is chiefly local, and all those who belong to the trade are people of one type. There can be no doubt that, in such a trade as this, the effects of routine are likely to become very widely felt.

This is the first of the truths which we have to note. The second is this. It is true that, in the long-run, the wages of labour cannot be lower than the value in exchange of labour; but temporary variations are conceivable, and strikes may shorten the duration of these. If, in consequence of increased foreign demand or other causes, the profit of the *entrepreneur* increases, even on the margin of production, he will extend his business, or competitors will appear, so that the demand for labour will increase. But how quickly this will come about depends upon many causes. In the chapter on profits¹ we showed that, for a time, a surplus may be earned by the whole body of *entrepreneurs* in a given branch of industry; that is to say, for the time during which the industry is rapidly expanding. Here again we have room for important action on the part of workmen's organisations; if they are efficient, they sometimes hasten the advent of an increase of wages.

We cannot be sure, however, that this increased rate will be maintained, unless the prosperity, which we have assumed, be lasting, and more especially unless it be of a general, or almost general, character, so that the increase in wages may not bring about an increase in the number of persons seeking employment.

There are also branches of industry which enjoy a legal or a virtual monopoly, and it is by no means certain that there are not others in which competition is imperfect because people do not know of the profits to be made in them.

¹ Cf. *ante*, pp. 250, 251.

Will it be possible in such cases, it may be asked, for wages to be permanently raised through the instrumentality of workmen's organisations? It will not, unless the organisation be so perfect that it can control the whole supply of labour, or unless the trade be one which can only be engaged in by workpeople possessed of special knowledge or skill. Failing these conditions, the influence of workmen's organisations upon wages will here also be of a temporary character.

And now for the third of the truths which the consideration of THORNTON'S theory enables us to recognise. A clue to it is furnished by what has just been said, and also by the distinction made, further back,¹ between the number of existing workpeople and the number of persons offering to sell their labour. Given a trade which can only be carried on by workmen possessed of great physical strength or skill, and assuming that these workmen, although numerous in an absolute sense, form, nevertheless, a relatively small proportion of the whole of the workpeople in the country; assuming, moreover, that they have to pay a high rate of contribution to their Trade Union, so that the Union possesses plenty of funds, and is therefore powerful; assuming all these conditions to be fulfilled, it would be quite possible to conceive of THORNTON'S theory being correct. Powerful organisation of the workers in a trade may contribute towards the keeping of wages in that trade, not only temporarily but permanently, at a higher figure than would otherwise be possible. There is nothing in the theory of value to prevent our arriving at this conclusion. The trade union is strong enough—this we assume—to prevent the employment of non-members, or at any rate to limit their numbers very much; and none but men thoroughly efficient in their trade can pay the high contributions required for membership; in fact, no others are admitted to the Union. Under such circumstances as these, the Union controls the labour market, because it controls the supply of labour. But its rule is not absolute. If it forces up wages in such a measure that full employment can no longer be found even for those of its members who are in the prime of life, or if the demand for labour is reduced by long-continued depression, or if the funds of the Union are exhausted by

¹ Cf. *ante*, p. 257.

repeated strikes, the employers need not fear strong resistance if they are desirous of reducing wages. The history of the English Trade Unions furnishes many instances of splendidly organised societies having to abandon fighting, so that for a certain time strikes actually fell into disfavour with these Unions. But within fixed limits, Trade Unions are able to influence wages, and what has just been said enables us to trace these limits. A Trade Union controls the labour market in so far as it controls the supply in relation to the demand for labour in that market. The power to exercise this control slips from the Union when, by forcing wages too high, it causes the demand for labour to slacken, or when that demand slackens owing to other causes. Let the supply of labour, as regulated by the Union, be represented by 100, the demand for labour also by 100, and the wages by x . Forcing up wages beyond x will cause the demand for labour to drop below 100, and the same result will be brought about by decrease in the demand for the article which is being produced, or by foreign competition. The demand for labour will then be 90 or 80 as compared with a supply of 100, and after such a disturbance of the equilibrium, it will be impossible for wages to remain at the same level.

We referred to the English Trade Unions. The true strength of these Unions, as may be gathered from their own reports, lies in artificially limiting the supply of labour. And the Unions are aware of this. However their policy may have varied, there are two points in which it has always been steadfast, namely, in limiting the number of apprentices and in keeping non-Unionists out of the trade, as far as possible. A journal, started in 1880 as the organ of a Glass-workers' Union, remarkable moreover for the very moderate tone in which it was conducted, used to exhort members to "look to the rule and keep the boys back"; and WILLIAM CRAWFORD, who for a long time held a prominent position among the leaders of Trade Unions, more especially in the mining industry, wrote a letter some years ago, in which he expressed himself in the following terms: "The time has come when there must be plain speaking on this matter. . . . Either mingle with these men in the shaft, as you do in every other place, or let them be ostracised at all times and in every place. Regard

them as unfit companions for yourselves and your sons, and unfit husbands for your daughters. Let them be branded, as it were, with the curse of Cain, as unfit to mingle in ordinary, honest, and respectable society.”¹ Note also the interesting statement made before the Royal Commission on Labour in 1892 by Mr. WHITTAKER, who represented the Amalgamated Society of Engineers, the greatest of the English Trade Unions.² From that statement we gather that the minimum wages fixed by the Trade Unions can only be earned by men who have not yet entered upon their fifth decade. The Union forbids its members to work for less, so that such of them as have passed, say their forty-fifth year, can no longer work at their trade. The Union pays them unemployed benefit until they reach the age at which they become entitled to the superannuation benefit. But, as may be gathered from the statement, all this fails to effect what is desired; there still continue to be “too many in the trade.” There are always “too many in the trade” when the wages in that trade have been forced above the level at which supply and demand balance each other.

This is lost sight of by those who consider organised labour an agency of great value in determining wages. (Of course it is with the efficacy of organised labour in this respect alone that we are now concerned.) Within certain limits, we can fix wages as high as we like. But if we fix them at a figure higher than that at which there is equi-

¹ SIDNEY and BEATRICE WEBB, *The History of Trade Unionism* (London, 1894), p. 280.

² (Group A, question 22,973.) The statement was as follows:—“We find that the surplus number are never altogether absorbed, and also that the difficulty of men getting employment brings them on our superannuation fund earlier than what they would otherwise go; because there is such a quantity of young men in the market in competition for work, that the men who are about forty or fifty years of age have no chance whatever. Therefore, the only result is, that they remain for a number of years on the out-of-work benefit of the society, and as soon as they arrive at the age at which they become entitled to superannuation, they go to our superannuation fund, and we find that the number that are going on to the superannuation fund, although we have extended the age at which they become entitled to it, is getting more and more every year. That is a very clear indication that there are too many in the trade.”

From the answer to question 22,975, it appears that only those who have attained the age of fifty-five, and have belonged to the union for at least twenty-five years, are entitled to the “superannuation benefit.”

librium between supply and demand, an increase takes place in the number of the unemployed. From the extent of the existing scarcity of employment, it is possible to judge whether wages have been artificially depressed or not, just as it is possible to judge from the quantity of goods remaining unsold in shops at the end of a season, whether shopkeepers have fixed their prices too low or not. If they had really fixed them too low, none of the goods would remain unsold; in fact, their stocks would have run out before the end of the season. Similarly, it may be said that, if employers could depress wages artificially, scarcity of employment, as a chronic phenomenon, could not exist.

“Labour will not keep,” says THORNTON, therefore the worker, as a rule, gets too low a price for his services. But the same thing may be said of yeast, of bread, of fruit, of fish, and of other goods too numerous to mention. It may with equal truth be said of the services rendered by a machine, or by a quantity of circulating capital, that they “will not keep”: every day, every hour, during which the machine stands idle, or the circulating capital is not being applied, is irretrievably lost. The workman cannot speculate with his labour. Granted. But is it absolutely certain that people who produce a certain quantity of an article every day would be acting unwisely if they avoided speculation and sold whatever they happened to have on hand at fixed times? The person who has goods that are not liable to spoil through being kept, can await a favourable opportunity for selling; but if many people adopt this policy of waiting there will be keen competition among sellers later on. THORNTON’S argument is defective. The “keeping” of labour—supposing that it could be kept—would not diminish the supply of labour, it would simply delay it. At a given moment there would be fewer people offering to sell their labour; but their number would be all the greater later on. Organisation in a particular trade is capable of achieving its purposes, because, in a particular trade, it is capable of permanently limiting the supply of labour. But this limitation leads to increase in the supply of labour in other trades; and if all workpeople were organised, the conditions under which alone a Trade Union can exercise a permanent influence upon the rate of wages would

nowhere be fulfilled. We do not mean by this that organisation would then be of no use, only that its usefulness would consist in something other than influencing the rate of wages. We will return to the subject of Trade Unions in a later part of this book, and we will then show how greatly they ought to be valued.

It has been contended that, in this demonstration, no regard has been had to actual facts. But is it not a fact that, in every trade of any importance, the competition among *entrepreneurs* is very keen, and that, on the margin of every branch of production in which many workpeople are employed, the earnings of *entrepreneurs* are scanty, nay, that loss is frequently incurred? If the wages paid to the workpeople are less than the value in exchange of their services, what becomes of the advantage derived from those services? We ought to be able to trace it, not only to the surplus-earning *entrepreneurs* but to the others as well; the only possible inference would be—and this is the gist of the proposition which it is sought to prove—that the *wages* earned by *entrepreneurs* are unduly high in most trades. But in what trade of any importance can *entrepreneurs* be said to earn too high a wage in these days? Can they be said to do so in agriculture, where many have the utmost difficulty in maintaining the struggle for existence? Or in industry, where disappointments are numerous? Or in commerce, where failures frequently take place? Or do the advantages that are supposed to be derived from cutting down wages go towards increasing the rate of interest? The question is sufficiently answered by the low rate of interest.

People are apt to think that a rise in the wages of a trade is impossible unless the workpeople employed in the trade are organised; they are afraid lest the ordinary laws of supply and demand should not operate with sufficient potency to bring about an increase of wages. This also is at variance with facts. Wages in industry in France rose about 52 per cent. between 1853 and 1877, yet in those years strikes seldom took place; in 1874 the number did not exceed 21.¹ In Amsterdam, the wages of carpenters rose quite 25 per cent.

¹ Cf. *Bulletin du Ministère des Travaux publics* for March 1881 (pp. 218, 219), where there is a very interesting table.

between 1869 and 1876.¹ In Belgium, the earnings of work-people employed in agriculture were just about doubled between 1830 and 1850; in the case of men they rose from 10½*d.* to 1*s.* 11*d.*, and in the case of women from 6½*d.* to 1*s.* per day.² The wages of domestic servants have gone up considerably in Holland in recent years, yet we cannot find that domestic servants have been organising. The wages of labourers employed in railway construction in the Preanger Regencies (a province of Java) rose quite 100 per cent. in 1880,³ and yet the labourers in Java were not organised in Trade Unions. Examples of this kind might be adduced almost *ad infinitum*. When a rise takes place in the value in exchange of labour, the wages of labour must inevitably go up, because the increase in that value causes a surplus to accrue to *entrepreneurs* on the economic margin of production, and it is impossible for a surplus to continue to accrue on that margin, except in special cases. The competition among *entrepreneurs* who are desirous of earning it causes it to disappear.

Let us dispose of a few further objections. We frequently hear it stated that a permanent increase in wages by means of strikes is possible, when the increase is general throughout the trade in which the strikes take place. As the whole of the *entrepreneurs* have to pay the increased rates, they can all demand higher prices, it is contended. Certainly; they can demand higher prices, but will they get them? *Entrepreneurs* always demand high prices whether they pay high wages or not; but the prices of things are not regulated

¹ The following very trustworthy statement shows the earnings in each year from 1869 to 1876 of two carpenters working for the same employer the whole time:—

Years.	Earnings.					
	Carpenter No. 1.			Carpenter No. 2.		
	£	s.	d.	£	s.	d.
1869	40	14	1	39	9	9
1870	41	3	3	41	6	6
1871	45	12	3	41	18	5
1872	55	2	3	56	12	3

Years.	Earnings.					
	Carpenter No. 1.			Carpenter No. 2.		
	£	s.	d.	£	s.	d.
1873	60	1	1	56	17	1
1874	51	2	6	57	19	11
1875	53	16	5	56	19	2
1876	54	11	9	59	13	9

² *Bulletin de Statistique du Ministère des Finances*, 1886, Part II. p. 68.

³ Cf. N. P. VAN DEN BERG, *The Financial and Economical Condition of Netherlands India*, third edition, p. 28.

by the wishes of *entrepreneurs*; they depend upon the relation of value between money and goods. And this relation is determined by a combination of causes in which the wishes of *entrepreneurs* do not figure.

The sole reason why wages affect prices is, as we have already explained, that the proportion between wages and interest as ingredients in the price is not always the same. Were this not so, it would be possible to state as an absolute proposition that the prices of goods are not high or low because wages are high or low, but that wages are high or low because the prices of goods happen to be so. If the ratio of exchange between money and goods becomes altered, so also will the ratio between money and labour, but the latter alteration will be subsequent to, and the result of, the former. A painting by a famous living artist is not dear because the art-dealer has had to pay the artist a high price for his labour; but the painter is able to obtain a high remuneration from the dealer because his painting possesses great value. What has been said of wages also applies to interest. If the proportion between wages and interest were the same in all prices, the manner of sharing the product between capital and labour would only be a matter for arrangement between these two. But, as we know, things are otherwise owing to the fact that the proportion between wages and interest differs in different prices. In the case of articles which cost much in labour, the cost prices are increased in proportion to those of other articles by the raising of wages. But this circumstance does not render the artificial raising of wages any the easier; it renders it the more difficult, in fact; just as it does the artificial raising of interest. All that has been said of interest is applicable to wages as well.

Suppose that wages were paid, not in money, but in goods; that an operative employed in a cotton-spinning mill, for instance, received, instead of so many shillings, so many pounds of yarn per day or per week. What would determine his money wage, supposing that he had no difficulty in disposing of his yarn? Precisely what determines it now; namely, the amount of his share of the goods produced, and the money value of these goods. No one would suppose that it

was within his power to increase that money value artificially. But that which would be beyond his power under those circumstances, is equally so under existing circumstances, where the manufacturer undertakes the sale of the goods and pays the operative his share in advance in the shape of money.

A second objection remains to be disposed of. We mention it because the process of answering it leads up to a matter which must not be overlooked, namely, foreign competition. An essay written some years ago by Professor BRENTANO¹ contained a demonstration, the substance of which was as follows: As a result of strikes, wages have been increased in an important branch of enterprise in England—in agriculture, let us say. The effect of this is, that it no longer pays to cultivate the most inferior tracts of land, and that the labourers hitherto employed in cultivating those tracts are discharged. But there is no cause for concern in this, as the restriction of cultivation will make it necessary to import more corn than before, and the additional imports of corn will have to be paid for. How will they be paid for? With gold? England could not continue to do this for any length of time, as she is not a gold-producing country. The additional imports will have to be paid for with products of English industry. Thus there will be an increased demand for these products, and in this way work will be provided for the discharged agricultural labourers. The increased rate of wages in agriculture, though brought about artificially, will be maintained, and nobody will be any the worse except the land-owners, whose rents will have fallen.

Where is the flaw in this argument? From the conclusion to which it leads, we know that it cannot be sound. That conclusion is, that it would be possible to force up wages to a point at which it would no longer be possible to get any advantage from cultivating any tract of land, however fertile, or however favourably situated it might be. The imports of foreign corn—consequently the demand for products of English industry—would then be increased to an extent far exceeding what was assumed above; not merely would land yield less rent, it would yield no rent whatever, and the workers would

¹ *Zeitschrift für die gesamte Staatswissenschaft* (1876), pp. 469-471.

be the gainers! The flaw in the argument is this. When two nations trade with each other, one of them may certainly induce the other to trade more extensively; but only by making it advantageous for the other to do so, that is to say, by altering the ratio of exchange in favour of the other. To apply this to our illustration: England may certainly induce foreign countries to supply her with more corn, to purchase more of her industrial products; but only by offering a higher price for the corn and asking a lower price for the industrial products. The discharged agricultural labourers seek employment in factories and similar establishments and there they depress wages. This depression will be permanent if they adhere to their resolution not to return to the land. Producers of goods, of which the cost price is composed largely of wages, will then, it is true, find both the home and foreign demand for those goods increasing, but only to the extent necessary for ensuring larger sales of such goods as have been produced at a lower rate of wages. Furthermore, corn prices will be somewhat raised by England's increased demand for corn; bread will be somewhat dearer in England, somewhat less bread will, therefore, be consumed in that country. And what will be the final outcome of all this movement? The new condition of things cannot last. Wages have risen in agriculture; they have fallen in manufacturing enterprise. After a while, there will be just as extensive a migration of workpeople from the factories to the land, as there previously was from the land to the factories, and this will continue until things have once more settled down to the old condition.

BRENTANO's demonstration is based upon a proposition, the great importance of which we shall see later: increase in the supply of foreign products brings about an equivalent increase in the demand for home products. But BRENTANO applies the proposition too widely. If foreign nations ask us to trade more extensively with them, we can make our own terms; but if we ask them to trade more extensively with us, we must accept such terms as they offer.

There is nothing in the laws governing international trade to justify the belief that the effects of successful strikes will endure permanently. Rather do these laws operate as an additional obstacle to their permanent duration. For no

sooner has the artificial raising of wages caused a decrease in the production of goods, the price of which consists largely of wages, than imports from abroad prevent those goods from becoming dearer. And the increased foreign demand resulting from these imports will gravitate towards articles in the prices of which wages do not constitute so important an element. Thus redundancy of labour will arise from a new cause. This, combined with the redundancy already existing from other causes, will swell the volume of unemployment. This is the only conclusion at which we could arrive after examining BRENTANO'S demonstration.

§ 3

Wages and Expenditure

Wages, according to some, depend upon the organisation of labour. According to others, they depend upon expenditure. The latter theory is very widely accepted, and we find among its adherents even so learned and able a writer as J. A. HOBSON.¹ The standard which people apply when judging of a law, or tracing the result of an occurrence having an economic bearing, usually resolves itself into the question, How will the law or the occurrence affect expenditure? For some reason as yet unrevealed, special importance is attached to private expenditure. Taxes tend to the reduction of private expenditure; but this is counterbalanced by an increase in State and local expenditure, so that taxes do not diminish expenditure in the aggregate. This truth is so obvious that it cannot fail to strike even the most casual observer. And yet, we are told that taxes have an adverse effect on expenditure.

If the current view were correct, many economic theories would have to be revised. RICARDO demonstrates that it would be a matter for regret if increase in public expenditure did not result in restriction in private expenditure, his theory being based upon the fact that it is desirable that capital should be formed. If the current view be correct, then, not only

¹ *The Evolution of Modern Capitalism* (London, 1894), p. 284. According to GIDE (*Principes*, fourth edition, p. 390), even MONTESQUIEU wrote: "*Si les riches ne dépensent pas beaucoup, les pauvres meurent de faim.*"


RICARDO'S theory, but all that has been said in the foregoing pages as to the *rôle* of capital in determining wages, is opposed to the truth. The more people save, the less they spend; the less they save, the more they spend. If the level of wages be raised by increasing expenditure, then it must be depressed by creating capital.

It is most important that we should arrive at a definite conclusion concerning this question.¹ In the introduction we pointed out² what constitutes the essential feature of ADAM SMITH'S system; we formulated a proposition, not stated by the author himself, but into which the whole of his teaching may be said to resolve itself, namely, that exchange produces no modification of any importance in the main requisites for material welfare. But this proposition would be inadmissible if the current theory concerning expenditure were correct. If Society were organised on a communistic basis, nobody would dream of calling consumption a source of general wealth; everybody would accept as an axiom the simple truth that, the more we consume, the less we have left. If private ownership and exchange render this axiom untrue, then they *do* modify the main requisites for material welfare in a very important respect, and the theory propounded by ADAM SMITH in the beginning of his work needs much qualification; so much, indeed, that it may be doubted whether any of the original would be left.

Another reason why it is necessary that we should examine the point now before us very closely is, that many people, though they know how to judge correctly of the manner in which expenditure affects wages, are yet unable to state the true reasons on which they base their judgment. The result is, that they straightway fall into error when they come to discuss the subject of providing employment, a subject very closely allied to the one with which we are now concerned. The same mistake is sometimes made in the treatment of both subjects; people forget that capital is the sole provider of employment.

¹ "It is no wonder," says JOHN STUART MILL, "that political economy advances slowly, when such a question as this still remains open at its very threshold."—*Principles* (People's edition, p. 50).

² See *ante*, p. 9.



Expenditure is said to create employment; in what sense are we to understand the word expenditure here? The current theory, as we have already seen, leaves this an open question, but it contains an expression from which it is possible to see why so much importance is attached to expenditure, and we find that it is because expenditure "brings money among the people." It seems, therefore, that the current theory is opposed more especially to the hoarding up of money; money should be spent, not hoarded. It seems pretty clear that the theory is in some way connected with the notion that the formation of capital consists in accumulating and hoarding coin, a notion for which some grounds existed in former times, when the credit system had developed but little. Most of the capital existing at any time has been created under circumstances different from these; in any case it is quite certain that money is very rarely hoarded in these days.

The difference between the man who spends and the man who saves does not lie in the fact that one parts with his money and the other does not; it lies in the nature and destination of the goods which they purchase respectively. As a rule we do not notice this, because the formation of capital has, in many cases, for its direct result, the purchase of stocks or shares; we must look beyond this direct result, however, and see what becomes of the capital that was used for the purchase of those stocks or shares. Suppose a man has saved £1,000 and used it for the purchase of Consols. A sum of £1,000 will now have got into the hands of some person who previously owned consols, and who will not allow that capital to lie idle. If he uses it in buying some other kind of stock, a third person becomes possessed of the capital; but for however long a time it may keep on changing hands in the stock market, it must ultimately find its way into some investment outside that market. It gets into the hands of a manufacturer, who spends it on the construction of a machine, or into the hands of a landowner, who applies it to the improvement of his land. Has not the money been "brought among the people" in this case? Why should the public welfare be advanced more by the purchase of good things for a feast than by the purchase of a machine; by the ordering of clothes, more than by the building of a warehouse? The

food will be consumed in a few hours, the clothes will be worn out before long, but the machine or the warehouse may be used for many years.

We will answer a number of objections and questions to which such observations as these usually give rise.

Firstly, it is said that diminished expenditure results in diminished production. It is not to be supposed that merchants and manufacturers would think it worth their while to make great efforts and incur great risks, if they were debarred, on moral grounds, from using the profits thus obtained in ministering to their own enjoyment and that of their families. Wants—using this word in its widest sense, and so as to include material wants of the higher kind—constitute the chief incentive to labour; a nation whose wants are few is uncivilised and poor. If the rich lived like the poor, there would be no more rich after a few generations.

We pause to consider this objection, not because it counts for much, but because it embodies observations which, of themselves, and quite apart from the very special problem with which we are now concerned, well merit our attention. Whenever it is demonstrated upon economic grounds, that the effect of expenditure upon wages is not favourable,—or, as GIDE expresses it: *que la dépense règle la production, mais ne l'alimente pas*,¹—many people think that an attempt is being made to formulate a rule of life according to which every one is under a moral obligation to spend as little and save as much as possible. All the meanness and vulgarity that would characterise a life devoted exclusively to the accumulation of treasure is laid to the charge of the economic theory on which that rule of life is believed to be founded. But this is quite wrong. Economics is not a code of morals; a moral code based entirely upon economic considerations would never soar to any height. Moreover, it would be very one-sided. Economic considerations can have reference only to material welfare, and man has other objects in life besides the advancement of material welfare. We have our duties towards our family. We are ready to regulate our expenditure so as to permit of our doing something towards raising the standard of civilisation. Friendship and social intercourse have claims

¹ *Principes* (fourth edition), p. 393.

upon us, which we wish to meet to the best of our ability. And why should it be concealed or palliated, as if it were a thing to be ashamed of? The possessor of a large income likes to get enjoyment out of it for himself. The more exalted a man's character, the wider his sympathies, the nobler the form of enjoyment which he selects. But even the noblest forms of enjoyment may be expensive, often they are the most expensive, and to indulge in them is not always compatible with the formation of capital.

Undoubtedly expenditure, in so far as the objects to which it is devoted are worthy, does indirectly yield results favourable to material welfare. It cannot be disputed that a nation with few wants is uncivilised and poor; the general interests of a nation are not served by reducing the standard of its wants. Much less are they served, it is true, by directing wants into a wrong channel and stimulating them. The impulse to labour, which has its origin in the love of luxury, may develop into feverish excitement and lead to wild speculation and loss of fortune. But in a country where the standard of living rises steadily and among all classes of society, industry will increase. More will be spent, but more will also be produced, and the result will not be adverse to the formation of capital.

These few remarks do not solve the ethical question on which many people are disposed to reflect from time to time, namely, how far may expenditure be indulged in consistently with the demands of moral living? Neither do they adequately explain how luxury indirectly affects production; a question which requires to be treated under so many different heads—economic, psychological, physiological—that it will never be possible to solve it fully. Our sole object in making them was to prevent the question which forms the subject-matter of the present section from becoming mixed up with another question, totally different in its bearing. The proposition which we were disputing does not contend that expenditure stimulates production in the person who spends, but that it does so in the person who supplies the goods intended for consumption. The problem which we have to solve is in no way connected with the ethical questions just alluded to. Two persons work with equal industry and earn equal incomes.

The one spends all he earns, the other saves the greater part; which of these two, in virtue of the use which he makes of his income, helps to raise wages? According to the current theory, it is the former who does so; our demonstration leads to the conclusion that it is the latter, the one who limits his expenditure.

Here is a second objection. When a large number of wealthy people settle in a locality, they cause houses to be built and spend large sums of money in the place. There is increased prosperity, in which even the workpeople have their share. Should pauperism develop concurrently with this prosperity, it will be because the poor naturally gravitate towards a place in which many wealthy people reside. But if the influx of poor people were less strong, the advantages which accrue to the working classes from the large expenditure would be more clearly discernible.

In order to answer this objection we must have recourse to a hypothesis. Suppose that the wealthy people who have settled in the place have brought none of their capital with them, and that, owing to a peculiar combination of circumstances, no single *entrepreneur* in the place has instruments of production enough to permit of his increasing the scale of his operations in any way. The shopkeepers have their stocks, but they are unable to increase them. The builders would be only too glad to be able to engage actively in building operations, but all their capital is invested and nobody will give them credit. This is an extraordinary hypothesis, it is true, but we have to use it in order to be able to show wherein that prosperity originates, which unquestionably does follow in the wake of increased expenditure. In the first place, wealthy people do, as a rule, bring *some* capital with them, if only enough to cover their expenditure during the first few months. In the second place, capital in the shape of money remittances, or of goods sold on terms of long credit, comes from all parts of the country, and even from abroad, into a locality where large earnings can be realised. No wonder that prosperity appears in such a place; but it is the capital and not the expenditure that has given rise to it. The prosperity, like the poverty, has simply migrated thither. In order to show that it is the capital and not the expenditure

that creates this prosperity, we will invert the hypothesis, and instead of assuming (as we did just now) increased expenditure without the introduction of capital, we will assume the introduction of capital without increased expenditure. A large manufacturer settles in a town; he causes a factory to be built there, and devotes the whole of his profits to the extension of his works, in which more and more operatives are employed every year. Now, what will be the result? Some might be disposed to reply that, as the things produced in the factory must be sold somewhere, we are bound to arrive ultimately at expenditure as the final requisite for the payment of wages. But what does being sold mean? It means being exchanged for other goods, and there can be no other goods unless they are produced. Thus production and not expenditure is the primary requisite for the payment of wages, and production presupposes the existence of capital.

We do not mean by this to deny that any advantage accrues to a country from the fact that many wealthy foreigners settle, or spend a part of each year, in it. Who can deny that Switzerland derives advantage from the countless travellers who arrive there every summer and (in certain parts) every winter, and stay some months? The gains are probably not so great as they appear; since the capital required to supply the visitors' wants, in so far as it is not furnished from abroad, is withheld from other uses. At the end of 1893, Switzerland had invested in hotels and furniture alone a sum of £19,774,000, which yielded in that year an average interest of only 6·81 per cent.,¹ out of which insurance, maintenance, and depreciation had to be provided for. Still, the advantages are undeniable. To lose its foreign visitors would undoubtedly be disadvantageous to such a country as Switzerland.

In such cases there operates a cause of increased national wealth, of which we shall have much more to say when we are discussing international trade, namely, the fact that the ratio of exchange with foreign countries becomes more favourable. If we examine the trade statistics of Switzerland² we find that in 1893 there were—

¹ *De Economist* (1894), p. 776.

² *Annuaire de l'économie politique* (1895), p. 832.

Imported :—

Merchandise, to the value of	£33,100,880
Specie " "	1,355,160
Total	£34,456,040

Exported :—

Merchandise, to the value of	£25,858,040
Specie " "	1,947,840
Total	£27,805,880

We see from this, that the imports of merchandise exceeded the exports by £7,242,840; furthermore, that, as regards specie, the *known* exports were nearly £600,000 in excess of the *known* imports. But other specie was imported and exported, of which no account could be taken in the customs statistics, namely, that which was brought into and taken out of the country by foreign visitors. There is no reason to suppose that the stock of money in Switzerland was reduced in 1893; but the figures given above might certainly lead one to conclude otherwise. The annual indebtedness of foreign countries to Switzerland, arising from the sojourn of foreigners in that country, is ultimately discharged, not in money, but in merchandise, not brought by the foreigners, it is true, but imported into Switzerland in exchange for the money, or against the bills or letters of credit, which the foreigners bring with them or receive. This is proved by the excess of imports over exports of merchandise.¹

The example chosen is typical. A country in which much money is spent by foreign visitors does not allow its stock of money to increase indefinitely; it imports more goods than it exports, and the excess corresponds in value to what the foreign visitors have spent; the remittances which those foreigners receive will consist for the most part in bills of exchange drawn for goods supplied. If the visitors, instead of coin and bank notes, bills of exchange and letters of credit, had brought goods or ordered goods to be sent to them in the country which they were visiting, the economic effect of their expenditure would have been just the same. And

¹ To which other causes may have contributed.

what do they get in return for their payments,—for those things which they supply indirectly? Their return consists partly in services of various kinds, partly in food, drink, and other goods. Thus a country in which expenditure is incurred by foreign visitors, trades, as it were, with foreign countries, but does so upon very favourable terms. Firstly, because it takes care to be well paid; secondly, because it saves export freights. Holland exports butter, cheese, and cattle; it has to deliver them in the place where they are to be consumed. Would it not be an advantage to Holland if foreigners were to go there and buy the butter, cheese, and beef at shop prices? The advantage would lie in the fact that the Dutch people would get a larger quantity of other goods in exchange for those articles; and this is the advantage, the origin and nature of which we have been trying to explain.

Nevertheless, it seems to us probable that in such cases capital gains more than labour. When foreigners visit a country they do, no doubt, bring with them current coin or paper conferring a claim thereto; still, the supplying of their wants will call for buildings, instruments of production, and supplies of goods, and thus increase the need for capital. The same thing applies, even to a greater extent, when foreigners settle permanently in a country, because in that case there is less probability of ready-money payment. And what has just been observed has a still wider bearing. Let us consider it for a moment.

JOHN STUART MILL heads one of the sections of his *Principles*¹ with the words: "Demand for commodities is not demand for labour." This assertion has been rightly described as paradoxical; demand for goods is certainly demand for labour. MILL need not have had recourse to so strange a proposition in order to prove his contention that—to use his own words—"the demand for commodities determines in what particular branch of production the labour and capital shall be employed; it determines the *direction* of the labour, but not the more or less of the labour itself, or of the maintenance or payment of the labour." He might have reasoned thus: Granted that demand for commodities is demand for labour; but in that case supply of commodities is supply of

¹ Book I. chap. v. § 9.

labour; and, as nearly all expenditure presupposes a supply of commodities—otherwise, where are the necessary means to come from?—it is clear that expenditure does not increase the demand for labour. He might have added another very important thing to his demonstration, a thing which he did not overlook, but which he would have presented in a much clearer light had he introduced it in this connection.

Demand for goods is, unquestionably, demand for labour; but it is also demand for capital, and it is precisely by such expenditure as is generally held to operate most favourably upon wages, that the need for capital is most increased. Spacious dwellings, magnificent hotels, rich theatres, luxuriously fitted restaurants, shops exhibiting an abundant choice of goods—none of these things can be provided without capital. We hear of prosperity, which is supposed to be engendered by expenditure; were it not for the expenditure of foreigners, which adds part of their income to ours, surely this prosperity must always be confined to a particular class of *entrepreneurs* and to the class of capitalists. The fund out of which wages are paid represents, not the whole, but only a part—it may be the greater part—of a nation's circulating capital. But the greater the withdrawals from circulating capital, whether in the process of conversion into fixed capital or otherwise, the smaller the amount remaining over for the purpose of paying wages. This is a point to which, as a rule, too little attention is given. People wish to demonstrate that expenditure operates favourably upon wages, and they give reasons from which it is only possible to deduce that it operates favourably upon the demand for capital! Let it not be forgotten either how greatly the owners of building land benefit by the way in which population becomes concentrated in large cities; we do not say that this benefit accrues to them at the expense of wages, but it is certain that wages gain nothing by it.

The special importance which we attach to a correct understanding of this subject induces us to dispose of a third objection. If expenditure does not operate favourably upon wages—it is sometimes asked—how account for the fact that poverty always arises when expenditure is reduced? How comes it that the same thing happens when there ceases to be any demand for a particular article of consumption?

The question is easily answered. The person who buys or produces goods with the object of exchanging them finds himself disappointed if he cannot attain his object. He feels as if he had wasted his capital on useless labour. The loss which he suffers will be still greater if the demand has shifted to other objects. He may have expensive premises in which to sell the article, if he be a shopkeeper, or to make it if he be a manufacturer. But what conclusions, relevant to expenditure, are to be drawn from this? Either those who have hitherto been in the habit of buying the article are no longer able, or they are no longer disposed, to continue buying it. If they are unable, it means that their incomes have been reduced; if they are unwilling, it means that their demand has shifted to other objects. Society is based upon division of labour combined with a certain continuity of wants. If the wants change, or if some people become lacking in means to supply them, then the application of labour, the grouping of labour and capital, ceases to be in harmony with what is required at the given moment. Suppose that all manufacturers were in the habit of devoting half of their profits to improving or renewing their machinery, and that there were, in consequence, a large number of establishments for the construction of machinery. If all the manufacturers were now to decide upon spending the whole of their profits in the future, the result would be that employment would become very scarce in the engineering trade—a proof that the disturbance is due to change of demand irrespective of whether the new demand be for articles of consumption or for other goods.

Yet another word concerning a doctrine which is very frequently proclaimed in these days, and which can nowhere be better refuted than here. According to some, the arbitrary raising of wages tends to the advantage of the *entrepreneur* class, inasmuch as it increases the demand for goods. The *entrepreneurs* would be unable to dispose of their products, which are always increasing in quantity, if they did not manage to find purchasers for them among the working classes. For the wealthy constitute scarcely one-tenth of the population; nor do they purchase larger quantities of food and other

necessaries even when such articles become cheaper, or their own incomes become larger. With the working classes it is different. No sooner do they earn more than they consume more; thus a market is found for the products.¹

This reasoning is very defective. The sum which work-people will spend on new purchases can never exceed the amount by which their wages have been increased. The *entrepreneurs* never get back anything but their own money. They will have purchased raw materials, they will have burnt fuel, worn out machinery, enlarged their factories; and where will their profit be? They pay £1,000,000 more in wages, without being obliged to do so, and they get £1,000,000 back; not as a gift, however, but as the price of all kinds of things which they have supplied. Clearly they are bound to lose. And this calculation is much too favourable; for, when the *entrepreneurs*—in this case the manufacturers and agriculturists—pay £1,000,000 in the shape of increased wages, the sum which returns to them is not an equivalent, it falls short of this; it falls short by the difference between the amounts of the wholesale and retail prices respectively. We think it hardly necessary to dwell on this point any longer; one is astonished to find such reasoning in a scientific work like that of SCHOENHOF.

One thing more and we have done. Expenditure—putting aside that of foreigners—is not a cause of wealth for the workpeople, but may it not be so for the *entrepreneurs*? Not if by *entrepreneurs* we mean producers in the strict sense of the word only. If, owing to less being spent, more capital is being created than before, more *entrepreneurs* will be required in order to make use of that capital. Production will take a new direction, but its scale will not be reduced; if anything, it will be extended. It would also be wrong to maintain that, in a country where much is saved, the need for small industries is less than in a country where less is saved and more spent; factories and agricultural enterprises provide work for all kinds of small businesses, as we may see for ourselves any day. It cannot even be conceded that ultimately fewer shopkeepers will be required in such a country; for, as soon as the creation of capital has brought about an increase

¹ J. SCHOENHOF, *The Economy of High Wages* (New York, 1893), p. 64.

in the aggregate of incomes, shops will multiply. All that is true is, that at first the need for shops and other establishments for supplying the wants of wealthy citizens will be smaller. Fewer large shops will be started; speaking generally, the localities in which wealthy people spend their incomes will be fewer. We mention this, not merely by way of completing what we have had to say upon the subject under consideration, but also in order to explain more clearly how the doctrine which we are opposing has originated. When we enter a town and observe many fine hotels and brilliantly lighted restaurants, we are apt to regard that town as very prosperous. We are prone to take causes and signs of individual wealth for causes and signs of social wealth. Expenditure may be a cause of individual wealth; it is the main channel for releasing a portion of large incomes. But whither is this released wealth borne? Mainly into the hands of a particular group of *entrepreneurs*; only a certain amount of it finds its way into the hands of those individuals who benefit by being dealt with according to the Dutch proverb: "The hand that wins is liberal."

BASTIAT once wrote something which he headed: *Ce qu'on voit et ce qu'on ne voit pas*. To reveal the unseen is one of the chief uses of scientific inquiry.

§ 4

Schemes for Providing Employment

From what has been said in the last section, hints may be gleaned for coping with what is wrongly considered an evil peculiar to our own time, namely, want of employment.

It is not always by charitable schemes that this evil should be combated. In many cases there are means for doing so, the application of which would be retarded by charity. When workmen have forced up wages by means of strikes, and various *entrepreneurs* have reduced their undertakings in consequence; when growth of population has outstripped growth of capital; when corn prices have been rising for a long time, so that year by year a larger portion of the nation's income has had to be sent abroad to pay for the

necessary supplies of corn ; in these and all similar cases the equilibrium between supply and demand has been destroyed, and the only, though painful, expedient by which it can be readjusted consists in reducing the level of wages. Resistance to this reduction does more harm than good ; and though charity has a duty to perform in cases like these, it must give no support to such resistance. All charity has this drawback, that it restricts savings in the case of many who practise it ; and in circumstances like those just described, the creation of capital, as a means of strengthening demand, is more necessary than ever.

An effect quite the reverse of this is usually attributed to charity. It restricts expenditure, we are frequently told, and thus causes scarcity of employment. This statement is inaccurate, and the arguments based upon it are not even of service to those who, in spite of all that has been urged to the contrary, persist in believing that wages are affected favourably by expenditure. Charity never reduces the sum-total of expenditure, it simply alters the way in which that total is distributed. When a number of people jointly adopt the practice of saving a certain sum out of what they have been accustomed to spend in the year, and devote that sum to almsgiving, they certainly diminish the demand for particular classes of goods ; and for a time, until things have adapted themselves to the new condition, this will occasion disturbance in particular branches of industry. Enterprises are organised in such a way as to supply existing wants ; if these wants change, the existing organisation ceases to fulfil its purpose. But the weakening of the demand for certain classes of goods is at once accompanied by a strengthening of the demand for others, since the recipients of the alms are sure to put the money to some use.

No, it is when it does *not* involve retrenchments on the part of those who practise it, that charity—apart from its moral effects—does harm in an economic sense. Its injurious effects become manifest when it encroaches upon savings, and this it always does to a certain extent. If we want to practise a philanthropy which shall be free from grave objections, we must deny ourselves by exactly so much as, by our charity, we confer upon others in the shape of goods or enjoyment. In

this as in many other things, the course laid down by the loftiest ethical precepts is the same as that prescribed by economics.

It would be futile to try to evade this conclusion on the ground that saving may consist in the purchase of foreign stocks and shares, by the accumulation of which the property, but not the capital, of a nation is increased. It would be a poor kind of patriotism that declined to concern itself with the lot of the workers of other countries; such narrow sentiments are to be deprecated. The more so, as we ourselves are foreigners from the point of view of other countries; so that wrong principles, universally applied, will have their harmful effects for us too. Besides, there is no reason whatever for assuming that saving will lead exclusively, or even primarily, to the accumulation of foreign stocks and shares, since a portion of newly created capital always seeks investment in native industry, and every slackening in the growth of interest-bearing property, no matter in what that property consists, is, in itself, a cause of less abundant creation of capital in the future.

But we may be sure that the lofty ethical precepts to which we have alluded will never be fully complied with, as many would find it too difficult to comply with them. A person who has once adopted a certain style of living, cannot change it without a great effort, or without entailing hardship on his family. Charity, if extensively practised, will always lead to restriction of savings, and for that reason it must never be resorted to as a means of combating prolonged scarcity of work. For this there is but one remedy, and that is the reduction of the level of wages, and any effort to prevent or put off that reduction in such a case is to be condemned. It is to be condemned irrespectively of what has been demonstrated above. It would be wrong to allow a large number of able-bodied workpeople to live permanently on charity, even on that form of charity which consists in artificially providing work. Those who lend their support to such a condition of things are assisting in the demoralisation of the working classes. They are increasing the army of those in whom the sense of self-respect has been destroyed.

Philanthropic schemes are equally unavailing as remedies

for local scarcity of employment; such, for example, as may be seen in a town where the working population has grown too numerous, or where wealth has declined, so that fewer people than formerly are able to earn a living there. The only effective remedy in such a case is for the surplus population to settle elsewhere, or—if their migration be open to the objection of causing an equal degree of poverty elsewhere—for wages to fall. It would be tedious to prove this. Chronic scarcity of employment is always a sign of inequality between supply and demand in the labour market, and this inequality can only be got rid of by stimulating demand, that is, by reducing the wages, or diminishing the supply of labour.

It does not follow from what has been said that philanthropy must never intervene at all in such cases. Even after they have submitted to a necessary reduction in wages, the workpeople cannot all find employment at once, for capital has to assume certain forms before it can unite once more with labour in production. And when migration has to be resorted to, the exodus of some thousands of workpeople from a town cannot be accomplished with haste, nor ought it if it could. Thus there will be periods of transition, and it is during such periods that philanthropy can render invaluable services. Its aim should consist, not in struggling persistently with scarcity of employment, but in assisting the workpeople until they have righted themselves by agencies to which they themselves must have recourse, but of which, in some cases the effective operation, in others the application, requires time.

The same idea is expressed by saying that in such cases philanthropy, if well organised and directed, finds ample scope for temporary work, whereas unorganised philanthropy, acting upon the impulse of the moment, only does harm.

Besides cases in which philanthropic agencies are necessary, not for the purpose of combating scarcity of employment, but for alleviating the hardships incidental to a period of transition, there are other cases in which such agencies are peculiarly fitted for use as remedies: economic investigations do not lead to disparagement of the work, but to a more accurate delimitation of the domain of charity. There are periods when capital retires, discouraged by heavy

losses. The usual desire of the capitalist to enjoy interest is then overridden by fear lest his property should depreciate further. There are times, too, when the necessary raw materials are not forthcoming. We remember the well-known "cotton famine," as it was called, in England—the dearth of cotton at the time of the American Civil War, by which great distress was caused in certain manufacturing districts. To allow free play to the law of supply and demand in such cases would be inhuman, as it would cause thousands to die of starvation; it would also be foolish, seeing that matters would be likely to improve before long. In such cases it is neither necessary nor even possible to prevent wages from falling, but it is certainly expedient to restrict their fall by rendering a large number of workpeople independent of industrial wages. The best way to do this, both on economic and moral grounds, is to organise relief works.

But in what should these relief works consist? This is a most important matter. The belief is very widely held, that relief works should be of such a nature as not to be detrimental to private industry; that otherwise they will cause as much dearth of employment as they relieve. We admit the correctness of this opinion, in so far as it has reference to exceptional cases, such as those referred to above; but these are not the only cases in which recourse is, and must be, had to schemes for providing work. In some trades, owing to seasonal and other causes, there is periodical scarcity of employment, and charity cannot evade the duty of providing against such times. There are some, it is true, who hold that doing this simply helps to perpetuate wrong conditions by weakening the incentive to save during the months in which good wages are earned, and by swelling the number of persons seeking employment in particular trades. Doubtless, say these people, great poverty would have to be suffered for a while if charity declined to intervene any longer in such cases, but in the end the evil would diminish. Those who were improvident or extravagant would experience all the hardship entailed by such failings, while others would abandon the calling in which they were so frequently without work, and thereby relieve the market for the rest. All such statements, however impressively delivered at times, are mere hypotheses. They have never yet been put

to the test in a civilised European community, and it is very doubtful whether they would stand such a test. We will return to this point in a later chapter, where a few arguments will be stated against the theory which advocates deterrent methods in schemes for dealing with pauperism.

For the present we would merely allude to an observation made by CHARLES BOOTH, in his *Life and Labour of the People in London*, namely, that modern industry requires a certain "unemployed margin, some reserve of labour." In order that serious inconvenience may not arise at certain times, it is necessary that, at other times, there should be persons unemployed in some trades, since the number of persons required is not always the same. And the kind of inconvenience here referred to, produces difficulties not only for *entrepreneurs*, but for the community in general. If the supply of workpeople falls short of the number needed at a given moment, raw material perishes, crops cannot be got in, ships cannot be loaded or discharged. Such things must necessarily disorganise a variety of trades, and, by doing so, create fresh causes of scarcity of employment.

It will not be possible, therefore, for philanthropy to withdraw from the field of work of which we have been speaking, though here more than anywhere else its action will have to be tempered by discernment. It will have to discriminate between workers with large, and workers with small families, between those whose earnings are normal and those whose earnings are abnormal in the busy season. But even when it has eliminated all the cases that ought to be eliminated, there will still remain plenty of work for it to do.

The proposition which we shall now endeavour to prove is that, in organising relief work intended for cases of periodical scarcity of employment, the kind of work to be selected is that which (in the commercial sense) is the most productive; that regard for the economic interests (here again identical with the moral interests) of the community in general, does not prohibit our entering on the domain of private industry. The same thing may, we believe, be declared to be true of schemes for providing work for moral and social outcasts, for those who have lost, if indeed they had ever acquired, the habit of work, and whom it is desired to

raise to a better condition. In their efforts to achieve this purpose, people have often felt themselves hampered by an imaginary economic objection. Upon educational grounds, it was clearly necessary to choose work of a nature calculated to raise human beings, not to degrade them. It was felt that care must be taken not to set people to perform useless work, or work which taught them nothing. But it was feared that to choose other work was to cause detriment to private industry, to "take bread out of the mouths" of certain people. These considerations resulted in most cases either in a compromise or in surrender to the economic objection. Hence the prevalence attained by those wretched relief-work schemes by which so much harm has been wrought, and which the leaders of the Salvation Army have so rightly denounced;¹ hence also the mistaken course originally taken in the matter of prison labour. It is not enough to point out the moral disadvantage resulting from this. People must also be brought to see that the economic objection is a fancied one.

As a matter of fact, schemes which consist in setting people to perform useless, or only slightly productive work, are very expensive. If the sum needed for applying a scheme based upon the sound method be represented by a , then the sum $a + b$ will be required in order to apply a scheme based upon the other method. The latter is devised with a view to preventing a reduction in the demand for products of private industry; but evidently it fails in this respect, since the demand will be decreased by an amount equal to b .

But the error lies deeper. It consists in failing to recognise the truth that the real provider of employment always is capital. Whenever part of the demand for certain goods is supplied by relief work or prison work, private industry is certainly restricted to some extent in consequence. But part of the capital employed in the industry so affected then becomes released, and that capital does not remain unemployed for ever; it ultimately finds employment in some other branch of industry, and there provides as many people

¹ See (*inter alia*) BRAMWELL BOOTH, *Work in Darkest England* (1894, third edition), pp. 20-23. Also H. W. METHORST, *Werkinrichtingen voor Behoeftigen* (Utrecht, 1895), p. 66.

with a livelihood as it did before. We will express ourselves more accurately, so as not to leave any support whatever for the error that capital *must* be driven from private industry. The only circumstances in which this is bound to happen are those in which the wrong system has been in operation on an extensive scale and is suddenly abandoned in favour of a better system. Sudden transitions, even to a better state of things, are generally productive of difficulty for certain individuals. The introduction of new machinery, the construction of railroads, the abolition or reduction of protective duties, when suddenly effected, always entail hardship upon individual members of the community. But that is no reason why we should forbid the introduction of new machinery, or neglect to construct railroads, or persist in levying protective duties; it simply conveys the lesson that haste is to be avoided wherever it is necessary and possible to avoid it. So in the present case. As the population grows and its income increases, so also does its need for products. The effect, therefore, of gradually substituting a superior for an inferior system of providing work will not be to render existing enterprises superfluous, but to cause the direction taken by new enterprises to be other than it would have been had the old system been fully adhered to. A part of the increasing demand for products will continue to be supplied by the labour of those for whom philanthropy has provided work. This will certainly cause a contraction on one side of the domain in which private industry is free to develop; but there will be an expansion on the other side. The spirit of enterprise, stimulated by the capital which has been released, may be trusted to secure this.

Speaking of relief work, Dr. H. W. METHORST expresses himself in the following terms in his otherwise excellent thesis on this subject: "The great objection which it is impossible to get rid of altogether, is that all relief work, by placing manufactured goods in the world market, enters into competition with private industry. The mere fact that those, for whose relief such work is provided, practise a trade and sell the products of that trade, is not one against which any valid objection could be sustained; for, are not the persons who are thus relieved members of the community? Relief work which involved nothing more objection-

able than this would be industry in the ordinary sense ; but something more objectionable is, as a matter of fact, involved. If the articles produced in a relief institution had to pay for what they cost in raw material, wages, and administrative expenses, they would often have to fetch double or treble the price obtained for the same class of goods produced by private industry. In order to make it possible to sell these articles, not only has their price to be brought down artificially to the level of the market, but frequently the goods have to be sold for less than the market price." One cannot but feel that if this reasoning were sound, a very slight modification would suffice to convert it into a very strong plea against the introduction of machinery and in favour of the protective system. Either the objection is true only in regard to the difficulties incidental to the transition period, in which case it can be got rid of, more especially in towns in process of rapid development ; or it is fundamental, in which case, however, it is an objection against admitting any new competition whatever, home or foreign, on the part of persons who can produce more cheaply than those who have hitherto carried on the trade.

"Frequently the goods have to be sold for less than the market price." In the language of daily life, we would reply that the purchasers of these goods will then demand more of some other kind of article. This is the first advantage. And the relief work will entail less sacrifice upon the wealthy inhabitants, who will therefore be able to spend more ; so that we have here a second advantage in which private industry will have its share. In the language of science, this may be expressed as follows : Production is the source of all wealth. The dearer things are, and the greater the prevalence of poverty, the greater the necessity for production. If the course of things be such as to make it necessary that the energies of some shall remain unutilised, and if charity has to step in to provide against this ; or if some people have to be sent to prison, and thus withdrawn from productive industry,—there is already sufficient cause for regret. The labour which we provide for, or impose upon such people, can never yield value equivalent to the cost of maintaining them. But let us make this loss as slight as possible. Mankind lives

on what it produces. Its wealth can never be increased by setting people to perform useless work.

What is the best method of providing employment? A workman is unable, at a given moment, to perform services of sufficient value in his own trade. But this is no reason why his services may not possess value for other purposes, though their value may be less than that indicated by the normal wages. Charity now steps in. It receives the unemployed workman into an institution managed by competent men, whose first endeavour is to ascertain what kind of work he is best able to perform. They give him such work to do after fitting him as far as possible for the task. They ascertain the maximum value, as it were, which his labour still retains outside his own trade, and they utilise the result of the investigation to his own advantage. At the same time they stimulate him to put out all his strength by making it to his interest to produce much. An institution of this kind should be conducted, as far as possible, on the lines of an industrial concern. The inmates should be brought to realise that they are taking part in the great social work of production, though in an unaccustomed manner. Partly in order to evade the economic objection referred to, the plan has sometimes been adopted, in relief works, of manufacturing goods intended for distribution among the poor. This combination of two such different forms of charity—providing the unemployed with an income, and the poor with furniture and other articles—is to be deprecated, if only because the one imposes requirements totally different from those imposed by the other, and because they make the scheme expensive. But the chief objection against the combination of these two forms of charity is, that it prevents the scheme being regulated in the best way. The goods should be sold in order that the workman may see for himself how much his labour is worth, and in order to convince him of the genuineness of the industrial character of the institution. Compared with such devices as setting people to sort out agricultural produce previously piled in confusion for the purpose, or to clear away stones from fields on which they had previously been scattered intentionally, or to repair roads and ditches deliberately damaged beforehand—all of which devices have been practised more or less in former times,—the system just

described is indeed greatly to be preferred. It aims at being educational. But in seeking the best means of fulfilling this aim it stops midway. A scheme for providing work may, and should, be one of the highest forms of charity, and, to be this, it must comply as far as possible with the conditions requisite for success in an ordinary industrial concern.

The objection might be urged that an institution conducted on such lines may have serious consequences. Suppose, for example, that it supplied bread, and that a number of bakers had been obliged to choose some other trade in consequence; then, in the event of an increased demand for labour, the needful quantity of bread would not be baked. This objection is valid, but only in regard to perishable articles. In the case of non-perishable articles, regularity of supply is quite possible, even though the intermittent character of the scarcity of employment should be the cause of irregularity in their production. Still, it will be seen from this, that the application of the general principle—of selecting those objects on which least loss will be incurred—requires some limitation. This limitation must consist in the exclusion of perishable articles from the range of our choice.

But there is another thing to be learnt from the above objection. At the beginning of our demonstration as to the best system to be applied in connection with schemes for providing work, it was stated that the means for combating exceptional scarcity of employment are different from those to which recourse must be had in dealing with periodical scarcity. The grounds for this difference will now, we think, be evident. The reason why, in cases of periodical scarcity of employment, preference should be given to a scheme based on strictly commercial principles is, that the capital which such a scheme withdraws from certain branches of private industry may remain permanently withdrawn from those branches; and where the introduction of the strictly commercial system is gradual, there need be no question of withdrawing capital, but merely of preventing it to a certain extent from developing particular kinds of production. Neither of these things can be said of relief work intended for exceptional scarcity of employment. In this case the distress which renders the relief work necessary, usually manifests itself suddenly. The harvest has

failed; disturbances have arisen somewhere; an exhibition has attracted thousands of people to a town and has closed just as the winter sets in. Such cases call for prompt action, and to apply any system gradually is out of the question. But after a while the necessity for relief work ceases to exist; what would be the condition of things now, if transfers of capital from one industry to another had taken place in the meantime, and perhaps at great sacrifice? And if they had not taken place, a certain amount of capital would have been condemned to idleness in the event of the relief work having entered on the domain of private industry. Lack of employment for capital means lack of wages for workpeople. Where we have to cope with exceptional scarcity of employment, it would be wrong to apply the system which is so suitable for relief work intended to deal with periodical scarcity of employment. To do so would be like trying to cure a disorder by means which would cause the same disorder to break out elsewhere, probably on a more extensive scale.

Special cases require special measures. Here it will be necessary to find work of the most useful kind procurable, but at the same time of a kind not performed by others. We shall show in a later section that the commercial productivity of enterprises is a general, though not always an accurate, measure of their economic productivity. There are works of which the results possess little or no marketable value and by which the wealth of mankind is nevertheless increased. It is works such as these that should be chosen. Private industry, unless subsidised, never undertakes them because they afford no opportunity of earning profit; all the more reason why charity should select them for the purpose of providing employment for those with whom it deals.

A number of schemes have already been organised in accordance with these principles; and they have chiefly consisted in the construction of public roads. A public road, on which no tolls are collected, can never bring pecuniary advantage to the person who pays for its construction, unless, of course, that person has some specially important private interest to promote by having the use of the road. But the general welfare of a district is often greatly promoted by the construction of roads, so that a scheme in which the unemployed

are set to perform work of this kind may be very useful in an economic sense. Here, then, we have a rough indication of the direction in which the means for solving the problem of exceptional scarcity of employment must be sought. Whenever, owing to local circumstances, these means are not available, recourse may be had to the system of manufacturing articles useful to the poor, but too dear to be purchased by them, and consequently never supplied to them by private industry. We should not like to recommend this system in schemes for dealing with periodical scarcity of employment; but when applied to the organisation of exceptional relief work, its advantages are great.

§ 5

Reduction of Hours of Labour as a Remedy for Scarcity of Employment

We have now to examine the value of another opinion, which many hold in these days, and which also bears upon the question of scarcity of employment. There is a strong movement, as we know, in favour of the shortening of the hours of labour. Experiments have shown that in very many cases it is possible to reduce the hours of labour without diminishing production.¹ But even the most zealous advocates of the measure will admit that the conditions are not in all trades such as will allow of a shorter working day being attended by an increase—at any rate a proportionate increase—in the amount of labour performed per man per hour. Some, however, hold that this should not prevent our advocating the reduction of the hours of labour. Granted, they say, that the shortening of the working day causes, here and there, a falling off in production, there arises a compensating advantage, namely, a decrease in the number of unemployed. For, either more hands will be engaged to perform the work that has to be done, or that work will take longer to complete. In either case the effect will be favourable so far as scarcity of employment is concerned.

This opinion is correct—subject, however, to a certain reservation; and what that reservation is, may be seen from

¹ See G. M. DEN TEX, *Verkorting van den Arbeidsdag*, Amsterdam, 1895.

the following. One hundred agriculturists and one hundred artisans settle in a newly cultivated district, and each exchanges his products with those of the others. In order to make room for ten new colonists of each kind, all reduce their working hours by one-tenth. This will certainly have the effect of preventing the new-comers from being unemployed. The measure will have achieved its purpose, because each of the original colonists has been willing to submit to a reduction of income proportionate to the decrease in the amount of labour which he performs. If the old population allows the new-comers to share in the use of its implements and other capital, it really provides against their having to suffer want.

This illustration shows what we may, and in fact must, concede to supporters of the theory which we are now examining. They think it wrong that some should be working 12 or 14 hours per day, while others can scarcely earn anything; by reducing these long hours the army of the unemployed will, they think, be reduced. From a purely theoretical point of view—difficulties may arise in practice¹—there is nothing to be said against this, provided always that it be admitted that the application of this means for dealing with the unemployed can only result in a displacement of wages, that the man who works less will earn less, to the advantage of the man who takes his place. This is the reservation of which we have spoken.

There are some, however, who are not content with the recognition of this simple truth. No, they say, it is not true that a reduction of the hours of labour entailing a decrease in

¹ In order to avoid importing any new element into the question we refrain from touching upon this point. Some are of opinion that the practical difficulties are insurmountable. In an article on "The Probable Effect on Wages of a General Reduction in the Hours of Labour," in the *Report of the 60th Meeting of the British Association for the Advancement of Science* (London, 1891), p. 473, Professor MUNRO says: "It has been suggested that the net production could and would be maintained (if not increased) by the employment of the unemployed. Such a suggestion implies that there is a class of unemployed possessing the requisite physical powers, mental intelligence, and technical skill required in the industries where the hours of labour are reduced. No such assumption can be granted. Indeed, there is ample ground for contending that, as far as skilled industries are concerned, the bulk of the unemployed do not possess the necessary skill to engage in them."

The extent to which these observations are true, depends upon what the expression "skilled industries" is meant to cover.

production can only diminish the number of unemployed at the expense of those whose hours of labour are now excessive. The decrease of production itself contains the remedy, for it causes the goods to become scarce and therefore dear. The *entrepreneurs* will be able to get as much money for the smaller as they did for the larger quantity, so that there will be no need for them to reduce wages, although less work be done for those wages. Nor is there any occasion to fear that the prices will fall back to the old level when the engagement of new hands has rendered it possible to produce the goods as extensively as before. To entertain this fear would be to lose sight of something very important, namely, the increase in the demand which has been brought about through the fact that many who were previously unemployed have now become wage-earners. This increase in the demand keeps prices steady where they are in danger of falling owing to the revival of production. Thus it will be possible to bring the unemployed into the ranks of the wage-earners without affecting the rate of wages.

There are three mistakes in this reasoning. In the first place, it proves exactly the reverse of what it is intended to prove. Can it be said that the workman loses nothing when money wages remain the same, but things become dearer? According to the above demonstration, his real wages—by which we mean the sum-total of goods and enjoyments which he can procure—are reduced, and that is the main thing here. We contend that the money wage falls, but that prices remain the same. No, say the others, the money wage does not fall, but the prices are raised. Where is the difference?

In the second place, the reasoning is based upon a false enunciation of a true proposition. Scarcity causes dearness, we are told. This is only true when the scarcity is unaccompanied by a decrease in purchasing power, and such a decrease may be looked for in the present case. Demand is only another word for supply; decrease of production always involves decrease in the demand for products. If the hours of labour are reduced, less goods will be placed on the market; but for that very reason there will be fewer buyers, or the existing buyers will not be able to purchase as much as before. It is quite conceivable that the price of a particular article

may rise when, owing to a reduction in the hours of labour, less of that article is placed on the market ; though even then it is not certain that the smaller quantity sold at a higher price will realise as much money as the larger quantity sold at the lower price. But with every increase in the number of branches of industry in which the reduction of hours of labour is attended with the results here assumed, the possibility of higher prices resulting from the decreased supply becomes less. On the other hand, a new difficulty arises if the reduction in hours of labour be limited to the production of a few articles only. It is not enough that the prices of these articles should go up ; the higher prices must be maintained after the original output has again been reached. We are told that this will be ensured by the demand created by those now in work who were formerly unemployed. But what guarantee have we that the demand of these people will be directed towards the particular articles in the production of which shorter hours are being worked ? Thus we arrive at the following dilemma : either the shortening of the hours of labour and consequent reduction of output takes place on a large scale, in which case prices will not rise, since the purchasing power of many people will have been diminished ; or it takes place on a small scale, but then the higher prices, which may reasonably be expected to follow, will cease to prevail after production has been restored to its former level by the labour of those who were previously unemployed.

In the third place, not only international trade, but also the effect of increased wages upon the demand for capital, has been forgotten. International trade, by increasing the imports and lessening the exports of goods which cost much in labour, will speedily make an end of the rise in prices, and the demand for capital will send the rate of interest up to a point at which certain enterprises can no longer be profitably carried on, so that workpeople must inevitably be discharged. There will then be a recurrence of the scarcity of employment which was thought to have been disposed of, and this can only be relieved by the remedy which it was thought possible to evade, namely, the reduction of the daily wage.

It is a pity that the weak argument, of which we have

just disposed, should ever have been put forward, seeing that it has thrown a far too unfavourable light upon the theory which ascribes to the shortening of the hours of labour a favourable effect on employment. It would, of course, be a very good thing if wages could remain the same, while the amount of work to be performed for those wages became smaller; but this is not to be expected. It may conceivably happen in special cases owing to the goodwill of successful *entrepreneurs*, but not as a general rule. And why disguise the real fact? It is certainly a pity that the reduction of hours of labour can only relieve scarcity of employment at the expense of the daily wages of those whose hours of labour are reduced. But it is a still greater pity that a number of workmen should be unable at times to get employment in their trade; and if no means can be found for improving such a state of things, other than that of reducing abnormal earnings procured by working excessively long hours, the price is not too high, considering the advantages secured. The more so, as the reduction in earnings *per capita* would ultimately diminish; the loss would probably, in time, become distributed over a number far exceeding that of the persons who had originally to bear it. At least, if we may believe what experts declare, and what in fact has been proved by many experiments, that in a large number of cases no perceptible decrease of output results from a reduction in hours of labour.

The following illustration may serve to make this statement clear. Imagine a country where all the workmen earn 4s. per day. All of them, without exception, have their hours of labour reduced by one fourth; but 75 per cent. continue to produce as much as they did before; the others, owing to the nature of their occupation, are unable to do this, and the result of their labour decreases in proportion to the reduction in their hours of labour. Their wages are now 1s. per day less than before; instead of 4s. they now earn 3s. per day. But can this state of things last? Here we have workmen, all possessed of equal strength and skill, but some earning 4s. while others only earn 3s. per day; will not this inequality disappear? There is every probability that it will after a while. It would be difficult to calculate exactly how wages

will then stand, but this much may be regarded as certain, that any loss in earnings due to the reduction of hours of labour, and not made good by an increased output per hour, though at first borne by a part only, will ultimately be borne by the whole of the workpeople whose hours of labour were reduced; but in such a way that for each of them the loss will be smaller than it originally was for some.

Thus the theory which we have been discussing may be regarded as admissible provided it be freed from the error which has become attached to it. Nor must we fail to bear in mind that the greater the number of cases in which an undiminished output is maintained in spite of a reduction in the hours of labour, the less effective will that reduction be as a remedy for scarcity of employment.

§ 6

Machinery and Wages

There are many, too, who regard the destruction of all machinery as one of the means by which work could be provided for the unemployed. The machine owned by the employer, which we are expected to distinguish carefully from the tool owned by the workman, is regarded as the great competitor of the latter. It renders him superfluous; the more work it does, the less need is there for hand labour. If all machinery were to be dispensed with, wages would be much higher.

There is nothing easier than to show that there is a flaw somewhere in this argument, for we know from experience that the conclusion to which it leads is false. Machinery, as every one will admit, helps largely towards increasing production, and a nation's income is made up of products. In an age like this, where machinery is being largely and increasingly applied, that income must have grown very considerably. Who has benefited by this? Not the workman, we are told. Can it have gone to swell the profits of *entrepreneurs*? If so, how can we account for the fact that the rate of interest offered for the use of capital is declining more and more, although *entrepreneurs'* profits are only to be

got by having the use of capital! Or does it go to increase the incomes of landowners? HENRY GEORGE, a writer whose works on economic questions are among the most widely read of their kind, maintained some years ago that—

“Irrespective of the increase of population, the effect of improvements in methods of production and exchange is to increase rents. When means are discovered for enabling a greater saving of labour to be effected, the desire will arise to produce more. Now, for the production of wealth, two things are required—labour and land. Therefore, the effect of labour-saving improvements will be, to extend the demand for land; and whenever the limit of the quality of land in use is reached, to bring into cultivation lands of less natural productiveness. And thus, while the primary effect of labour-saving improvements is to increase the power of labour, the secondary effect is to extend cultivation and . . . to increase rent. Thus, where land is entirely appropriated, as in England; where it is either appropriated or is capable of appropriation as rapidly as it is needed for use, as in the United States, the ultimate effect of labour-saving machinery or improvements is to increase rent without increasing wages or interest.”¹

HENRY GEORGE considers it important that this should be clearly understood, seeing that it is supposed to furnish the explanation of the “fact” that the introduction of labour-saving machinery has “never brought any advantage to the workers.”² At the time when HENRY GEORGE’S books were published, a useful purpose was still to be served by refuting this demonstration,³ as rents had not yet begun to fall. But they have since fallen considerably, although machinery has gone on improving and its use has kept on extending. Now, at any rate, there can no longer be any question as to what has become of the additional income resulting from increased production. Money wages have not fallen—in fact, they have risen; but many of the necessities of life have become cheaper, so that the condition of the workpeople has improved. Nor are they the only people whose condition has improved. All whose incomes, expressed in money, have remained the same,

¹ *Progress and Poverty* (London, 1881), pp. 220 and 227.

² *Ibid.* p. 220. Cf. *Social Problems*, p. 187 *et seq.*

³ An excellent refutation is that of J. A. WALKER, *Land and its Rent* (London, 1883), pp. 141-182. An attempt to refute it was also made in the first edition of the present work, pp. 261-283 of the Dutch edition.

or have not diminished in the same proportion in which many prices have fallen, have benefited by the fall in prices. But since it is more especially in respect to articles of first necessity that this fall has taken place, it must be the work-people who have benefited in the greatest degree.

HENRY GEORGE'S proposition was untenable even at the time when he enunciated it. He speaks of the "fact" that the introduction of labour-saving machinery "has never brought any advantage to the workers." The following illustration may serve to show whether this is so or not:—

The price of a pound of cotton yarn, No. 40, in England was—

in the year 1779	.	.	.	.	16s.	0d.
" " " 1784	.	.	.	.	10s.	11d.
" " " 1799	.	.	.	.	7s.	6d.
" " " 1812	.	.	.	.	2s.	6d.
" " " 1830	.	.	.	.	1s.	2½d.
" " " 1882	.	.	.	.	0s.	10½d.

It is easy to show that the reduction in prices is primarily due to improvements in the method of production. Eighteen ounces of cotton are required for the spinning of a pound of yarn No. 40; and 18 ounces of cotton cost, in 1779, 2s.; in 1812, 1s. 6d.; in 1882, 7½d.; so that the price of the raw material only fell in the proportion of 100 to 30, while that of the yarn fell in the proportion of 100 to 5·4. There is another thing to be noted here. In 1779 there remained, on every pound of yarn, on an average, 14s. for the remuneration of capital and labour; in 1882 the amount remaining for that purpose was 3¾d.;¹ yet wages have risen, and the number of operatives employed in cotton-spinning mills in England has increased from 111,000 in the years 1819-21 to 240,000 in the years 1880-82, the proportion of adults being greater in the latter than in the former figure. But owing to improved machinery, the average annual production of yarn per operative for the years 1880-82 was 5,520 pounds, as compared with 968 pounds for the years 1819-21.² Here we have the explanation of what appears strange at first sight,

¹ HOBSON, *The Evolution of Modern Capitalism*, p. 76.

² SCHULZE-GÄVERNITZ, *Der Grossbetrieb: Ein wirthschaftlicher und socialer Fortschritt* (Leipsic, 1892), p. 132.

namely, that the united earnings of capital and labour per pound of yarn have become much smaller, and that wages have risen notwithstanding. Here also we have the explanation of the many similar phenomena in the domain of present-day industry, all of which bear witness against HENRY GEORGE's contention.

The argument which leads to an unfavourable conclusion concerning the effects of machinery upon wages must, therefore, be false. But where is the flaw? Surely it cannot be disputed that when manufacturers increase their fixed capital, the quantity of circulating capital is reduced, and we frequently observe that workmen are dismissed because a machine has been found that will take their place. When discussing the connection between interest and wages, we alluded to the inducement which exists for *entrepreneurs* to substitute machinery for workmen, when wages are high in proportion to interest, and it is a matter of common knowledge that manufacturers have been especially successful in this respect in the United States.¹ Is the workman unreasonable then in regarding the machine, not as his best ally, but as his most dangerous competitor?

The solution of the problem, though really quite simple, as will presently appear, is more interesting, and affords more food for thought, than we are usually given to understand. We are quite right in contending that, in the long-run, the workpeople benefit by the introduction and improvement of machinery; but it is quite wrong to contend that this benefit accrues to them automatically, in virtue of some economic law. It is only subject to the fulfilment of a specific condition, that the introduction and improvement of machinery can be beneficial to the great majority of the population. This condition has, so far as we can see, been always

¹ "The pressure of high wages," says HOBSON (*Evolution of Modern Capitalism*, p. 81), "is an economic force more powerfully operative than any other in stimulating the adoption of elaborate machinery." And SCHOENHOFF [*The Economy of High Wages* (New York, 1893), p. 33] says: "The law of gravitation is not more absolute than this, that where, as in America, the rate of wages per diem is a high one, the first object of the employer is to economise its employment. The result is, that in no country is the organisation of labour in mills and factories so complete as in the United States. In no country is the application of machinery carried to the extent to which it is carried in the United States." On page 84 he says: "We are inventors by compulsion."

fulfilled; but we cannot be sure, upon economic grounds, though upon other grounds it may be regarded as probable, that it will always be fulfilled. This statement is at variance with a theory which many exponents of our science regard as irrefutable.¹ Nevertheless, we believe it to be both necessary and right to dissent from that theory.

Let us take an hypothesis, which, fortunately, is never realised. Suppose that, in a country where all capital seeking investment has been invested, new machinery is applied on an extensive scale, and that it enables a great saving of labour to be effected; that, as a result, manufacturers are making large profits; finally—and this is the main point—that the whole of those profits are spent at once by the manufacturers. This last supposition, as to the immediate spending of the profits, is almost inconceivable; for it is practically certain that several weeks, not to say months, must elapse between the time when the profits are made and the time when the things that have been bought are paid for, and during those weeks or months the profits will have had the effect of eliciting an increased supply of capital for investment. Still, for the sake of the argument, we will suppose what is almost inconceivable. Not absolutely inconceivable, however; since the manufacturers may have ordered the things which they buy for their enjoyment or use in advance of the date on which they are in a position to spend their profits, and then not even a temporary increase of capital will take place.

Now, where, we ask, is an increase of wages to come from under circumstances such as these? We find here only a reason for wages decreasing in favour of *entrepreneurs'* profits, and thus indirectly in favour of interest on capital. Competition will, it is true, become keener in certain branches of industry, those, namely, in which large earnings are to be had; but this must cause capital to be withdrawn from other branches of industry, whereby wages will not readjust themselves, but the reverse. For in the industries in which it will have become profitable to engage, more machinery will be used and less labour employed in proportion, so that the change will be an unfavourable one for the latter. And although the demand for labour will be stimulated to some extent by the

¹ But not J. STUART MILL. Cf. *Principles* (People's edition), p. 59.

increase in the rate of interest and the fall in wages, it is clear that these causes will not be able to restore wages to their former level.

We expect of course to be met by the objection, that an increase of wages must follow from the very cause referred to, that is to say, from the increased expenditure of the manufacturers. But this is precisely what we wished to show: those who believe in the beneficial effects of the introduction and improvement of machinery *per se*, have to invoke the expenditure theory in support of their belief. And this theory serves them to no better purpose here than it does elsewhere. The profits cannot, so we are told, be spent without creating an increased demand for labour. There will be, in fact, an increased demand for certain classes of goods, and it is only by employing capital that this demand can be met. But by hypothesis, all capital is already invested, so this is another reason why capital will be withdrawn from other industries. And it is easy to see what those other industries will be; they will be those which supply the wants of the workpeople who are now either unemployed or in receipt of lower wages. The *entrepreneurs* who supply the new wants of the manufacturers will manage to secure such prices as will enable them to offer capitalists a rate of interest which others deem exorbitant. Thus there will be a partial displacement of capital and labour, and this is about all that may be expected to result from the expenditure.

But a more valid objection might be raised. It is this. The national wealth of a rich and prosperous people usually consists, for a part, in stocks and shares saleable abroad. The rise in the rate of interest will be an inducement for disposing of a large quantity of such stock, and the capital received in exchange from abroad will be invested in industrial enterprise. It is true that this will take place; but the objection brings us to a point at which we wished to arrive. So long as no new capital is employed in industry—it matters not whether it be the fruits of our own or others' savings, whether it be created at home or obtained from abroad by the sale of stocks—the event assumed in our hypothesis will be a source of unmitigated evil for the workpeople. Will products have become any cheaper, on the whole? There is not the slightest

reason for supposing that they necessarily will, since the substitution of machinery for labour does not necessarily imply any increase of products. There will certainly be an increased production of those articles which are being turned out at a smaller cost, since capital previously employed in the production of other goods will migrate towards the branch of industry in which, by hypothesis, large earnings are now to be obtained. But then the other articles will become more scarce through capital and labour being required for the manufacture of machinery.

The argument usually adduced in proof of the beneficent results of the introduction and improvement of machinery, takes for granted the very thing which gives rise to those beneficent results: takes it for granted, but makes no mention of it, to say nothing of laying stress upon it. We are reminded that the large profits which result from the lessening of the effort of production in a particular industry attract capital towards that industry. Yes, towards that industry, unquestionably. But part of the capital attracted thither is destined to be converted into machinery intended to displace labour. The conclusion generally arrived at is as follows: the demand for labour, after growing slack at first, will presently become strong, while the prices of the goods manufactured by machinery will be brought down by competition among the manufacturers. A link is missing here, since, from what has been occurring, nothing is to be looked for but a fall in wages, accompanied, it is true, by a fall in the prices of certain classes of goods, but also by a decrease in the production, and consequently by a rise in the prices of other kinds of goods. The missing link is this, that new capital must be introduced, and this new capital must originate in savings, otherwise its introduction will cause poverty in other directions. A portion of the profits made by the manufacturers must be left unspent; that is the only remedy.

Experience teaches us that this requirement has always been fulfilled. People who earn much, generally save something; and the more sudden and unexpected the advent of the large profits, the less the danger of the whole or even the bulk of them being spent. People do not change their mode of life in a day; and even if they wished to do so, it does not

always follow that they could. There are plenty of circumspect people who, before increasing their expenditure, would want to feel sure that the large profits were likely to continue. Many, too, feel impelled to adopt such a course as will ensure their having something to draw upon in bad times, or to bequeath to their families. Besides, it is just the successful manufacturer who has learnt the advantage of having plenty of capital; he has reason for believing that by acquiring more machinery and extending his business generally, he will increase his profits, even his rate of profits. The man whose whole being is bound up in his business, and who devotes his whole life to it, feels strongly interested in its success, quite independently of the material advantage which he derives from such success. Pride has something to do with this, but it is not the only, or indeed the chief, influence at work. One of man's best qualities is the love which he feels for his work. In the manufacturer, this love manifests itself in the desire to see his business constantly expanding and improving.

Will these causes of the creation of capital become less potent? In one respect it cannot be said that the fear is altogether groundless. Within the latter half of the nineteenth century, the joint-stock company has developed to a remarkable extent, and such a company—a "person" by legal fiction only—does not save its profits, but distributes them. The strength of the joint-stock company is, that it binds permanently to the business whatever capital has been invested in it; the weakness of the joint-stock company is, that it does not itself create the capital needed for the extension of its business. A wise directorate makes some provision for this by writing off largely for depreciation and by forming reserve funds; but these are mere palliatives. Here, unquestionably, is a danger which we must not magnify, but which we should do well not to ignore. It is only in the minds of certain optimists that an economic law exists, in virtue of which advantage accrues—of course after a "period of transition"—to the working classes, from the substitution of machinery for hand labour. If we must speak of a "law," the most that we can concede is, that there is an empirical law. The advantage that has resulted from the improvement or increased applica-

tion of machinery is certainly not imaginary, it is very great ; so great, indeed, that if the wishes of those who long for a wholesale destruction of machinery were realised, the result of such a wholesale destruction of capital would be, not the raising of wages, but the death from starvation of millions and millions of workpeople. But why has there been a very real advantage ? For no other reason than this, that circumstances, together with man's wisdom, added to the other factors mentioned above, have prevented the putting into practice of the expenditure theory ; a theory which more than any other popular error teaches what is absolutely false, and in this particular case prescribes what is directly opposed to the interests of mankind.

We have now supplied the missing link, and in doing so, if we mistake not, have reconciled many things which would otherwise be in mutual conflict. The machine does undoubtedly compete with the workman ; but if the profits made by the use of it are saved, it creates powerful allies for the workman. Then the machines compete with each other ; circulating capital, at first very scarce, becomes much more plentiful ; the profits of *entrepreneurs* drop to their former level, if not below it, and the rate of interest likewise. Thus the result of the whole movement is a general spread of welfare ; unless the workpeople, by increasing too rapidly, have neutralised much of what has been happening in their favour. How far this has actually been the case since the introduction of steam is a matter of common knowledge.

But it is easier now to realise that untold misery must ensue whenever a great and sudden increase takes place in the use of machinery in a country not possessed of a large amount of stocks and shares saleable abroad. This was the case with England at the close of the eighteenth and the beginning of the nineteenth century ; and the situation was greatly aggravated by the long war with France, which destroyed capital and paralysed trade. Nowadays, when the possibility arises of effecting a great saving of labour in a particular branch of industry, so that large profits are to be made in that branch, the capital which it attracts need not come out of other branches of industry in the same country ; it may be obtained by the sale of stocks and shares. In this way

the amount of capital employed elsewhere is diminished, it is true; but the harm is spread over so wide an area that it is nowhere felt with any degree of severity. Another factor for good in the situation is the close connection existing between the various "money markets," as they are called. Not only is there such a thing as a "reserve of labour,"¹ there is also a reserve of capital, which finds its way to the "money market," where it seeks investment at a low rate of interest for short periods. In the event of there being a fresh need for capital, some of this reserve is withdrawn from its temporary use; and if this should cause a local deficiency, the deficiency can be readily supplied from abroad. The rates of interest for discounts and loans then go up in such a locality, thus making a reason for the withdrawal of capital from the money markets of other localities. Owing to all this, the introduction—even suddenly—of machinery in a particular branch of industry has lost much of its harmful character, and its beneficial effects are speedily felt. But things were different a century or so ago. Labour was rendered redundant; all the more so because of the absence of strict legislation regarding the employment of children. Ultimately the evil disappeared, owing to the conversion of the manufacturers' profits into new factories. But it took some years to accomplish this.

The pains occasioned by the birth of modern industry are now a matter of history, and we are reaping the advantages of which they were the price. It was necessary that abnormal profits should disappear—they have disappeared; that new capital should be created—it has been created; that the use of machinery should extend until every machine had a large number of others to compete with—it has so extended. Nobody really dreams of a wholesale destruction of machinery, though occasionally regret is evinced at some new instance of hand labour being replaced by machinery. This regret is misplaced so long as there is reason to expect that a large part of the profits which accrue to *entrepreneurs* from the change will, as in the past, be converted into capital.

¹ See *ante*, p. 293.

§ 7

Work and Wages

There are two propositions which are frequently regarded as axioms: one is, that labour-saving appliances cause wages to rise automatically after a period of transition; the other attributes the same effect to increased zeal and efficiency in the workman. Knowing, as we now do, that the first of these propositions only embodies an empirical truth, we are more cautious in approaching the second. The question arises in our minds whether increased efficiency in the workman should not be classed among the causes which affect wages favourably only in the event of a certain condition being fulfilled; and if so, what that condition is. Or may we take it that the effect of increased efficiency on wages is always and unconditionally favourable?

It will help us to elucidate the question if we again have recourse to an hypothesis. Suppose that a new discovery has been made and applied, and that it does not substitute machinery for human labour, as in the former case, but simply increases the amount of the product. We mean a discovery by which it becomes possible, without incurring greater cost, to work the raw material to greater advantage, or to get more work out of the instruments of production. Obviously, the effect of such a discovery on wages can never be less favourable than that of increased zeal and efficiency in the workmen, but neither can it be more favourable; it will be the same in both cases.

Existing *entrepreneurs* will probably make use of the discovery in order to produce more. They are not absolutely certain to make use of it, but we will assume for the present that they do. The fact that they do will not cause wages to fall, but it will cause the article produced to become cheaper, and it will then depend upon the class of goods to which the article belongs whether the workpeople gain or not. If the article is one of a class of goods regularly consumed by the workpeople, they will gain most decidedly. If it does not belong to such a class, they will neither gain nor lose by the discovery, and the reason will be, that the increase in the returns of production has been restricted to particular commodities.

Now let us assume that the existing *entrepreneurs* do not increase their production. The assumption is quite reasonable, for the fall in prices, which their increased supply would bring about, may be so great that they will judge it necessary to limit the supply, and they may be sufficiently well organised to succeed in this (*e.g.*, in a country where high protective duties are levied, so that foreign imports have not to be reckoned with). Will there not now result a condition of things analogous to that which we described when discussing the introduction of machinery? And may not the conclusion be generalised as follows: Whenever an increase takes place in the productive power of labour, no matter through what cause, and when that increase is not followed by a proportionate extension of production, owing to the fact that *entrepreneurs* are afraid of a fall in prices, workpeople must be discharged and wages must fall?

When we carefully compare the two cases, however, we find that they differ in one very important point. In the case of the machinery no glut of capital is caused by the discharge of the workpeople, since fixed capital is substituted for circulating capital. In the other case such a glut is inevitable. Let the number of workpeople be represented by 100,000 and the product by 10,000. With the help of the improved appliances the 100,000 workpeople could now, if necessary, turn out a product of 20,000; but the *entrepreneurs* are anxious to avoid this, they want the output to remain what it has been hitherto. One result of this will certainly be the discharge of 50,000 workpeople, but a further result will be that a certain amount of capital previously required for the payment of wages will become redundant. And even if the *entrepreneurs* should spend the whole of their new profits, and there should be no means of obtaining capital from abroad, the equilibrium between demand and supply of capital will be destroyed. Owing to the discharge of the workpeople, wages have fallen; owing to the same cause rendering a certain amount of capital redundant, the rate of interest has come down. What a splendid opportunity for men of enterprise! Production, at first held in check by artificial methods, will increase until wages have risen to their former level. But then both labour and capital will benefit by the

fall in the price of the article, which had at first continued high, and this is what will constitute their advantage. This advantage increases with the number of branches of industry in which improved appliances are introduced, or in which—for it comes to the same thing—labour becomes capable of yielding larger results.

As regards the immediate results, therefore, the increasing of the efficiency of labour cannot be ranked in the same category with the saving of labour by means of machinery; the influence of the former is bound to be favourable even though the profits realised at the outset by *entrepreneurs* should not be saved, but spent. To save those profits would, of course, be more desirable in this case too, but failure to do so by no means destroys the beneficial effect which the increased efficiency of labour has upon real wages, that is to say, upon wages reckoned in goods. It must be admitted, however, that cases may occur where equilibrium is temporarily disturbed by the cause in question.

For the prices of goods differ greatly in point of susceptibility to the influence of an increase in the supply. There is nothing to prevent our assuming that, in a given case, the doubling of the supply will cause the price to drop by more than one-half, or that an even smaller increase of the supply will have that effect. It follows that increase of production in a particular branch of industry may reach its limit within a comparatively short time. If, for example, the total wages were £50,000 and the net sum (everything deducted except wages) realised by the product were to be brought down to £50,000 by a fall in the price, no profit would remain for the *entrepreneurs*. We should then have what is called “overproduction” in that branch of industry.

There are two ways in which a remedy for this condition of things may come about. Money wages may fall, and should the condition which we have described apply to a very large number of articles, such a fall is as inevitable as it is harmless to the working man; for when such a general, or almost general, fall occurs in prices, money wages may descend, while real wages ascend. Still, where the condition described is not very general, where it is confined to a few branches of industry, money wages will remain unchanged; but less workmen will

be needed. That which, according to our hypothesis, was brought about by combination among *entrepreneurs*, namely, the discharge of workpeople, is here brought about by the usual operation of supply and demand. This is the disturbance of equilibrium which may arise. In such a case, owing to an increase in the efficiency of labour, the demand for labour will diminish in certain directions.

But in other directions that demand will become stronger. For here, again, the discharge of the workpeople will cause a state of things different from what it would have caused had it been due to the introduction of labour-saving machinery. No circulating capital has been converted into fixed capital, but a certain amount of circulating capital hitherto set apart for the payment of wages ceases to be required for that purpose. As before, there is the guarantee that the cure is at hand, since we have no reason to suppose that the capital thus released will remain permanently withdrawn from industry. We can now picture to ourselves the course that things will take. The amount of available capital will be increased, and by exactly as much as will be required in order to provide employment for the workpeople who have been discharged. That the available capital and the available labour will unite in some way for purposes of production, may be regarded as certain.

One important observation, however, remains to be added. It is not certain that the very same people who were discharged will find re-employment; for the old and infirm are not readily engaged. Better energies than theirs may be available in the "reserve of labour"—to use CHARLES BOOTH's expression once more,—and where that is the case, youth and vigour will obtain the preference. Disturbances such as we are now considering, though very transient in their nature, always entail permanent hardship on certain individuals. There are two cases, therefore, in which increased efficiency of labour falls short of being an unmixed blessing. One is when it fails to bring about an immediate increase of production; the other is when it brings about such an increase, but does so in a way which leads to overproduction in particular branches of trade. Finally, if we bear in mind that the workman gains nothing by the fall in the price of the article which he pro-

duces, unless that article be one which he is in the habit of buying, we arrive at the conclusion that increased efficiency of labour, when confined to a few branches of industry, cannot be said to be unconditionally favourable to the wage-earners. Its results may be favourable, but are not necessarily so.

We are led to a much more favourable conclusion concerning the effect of increased efficiency of labour, when we regard it as applying to a large number of trades instead of to a few trades only. We must bear in mind that the disturbances of equilibrium just spoken of were due to the smallness of the economic area within which labour had acquired increased efficiency. The greater this area, the less the probability of such temporary disturbances. Supply of goods is demand for goods; fundamentally, all commerce is exchange. Money does not sever the connection between buying and selling; it only obscures it. When the production of goods of every description increases, so also does the demand for those goods. The farmer will supply more corn, but then he will want to be better clothed and housed. The cabinetmaker will turn out more furniture, but he will want to be better fed. And although, where progress is general, the danger of disturbances of equilibrium is not altogether eliminated,—increase of wealth as a cause of increased demand for goods generally operates unequally upon different classes of goods; indeed, the demand may practically cease to exist for goods of inferior quality,—it must, nevertheless, be recognised that an increase in the efficiency of labour, extending over a variety of industries, is a real blessing to the working man.

This is a truth which does not obtain full credence in labour circles. Hence the deplorable practice known under the name of "marking time." Hence, too, the objection of English trade unions to piece-work;¹ an objection based

¹ WHITTAKER, of the Amalgamated Society of Engineers, expressed himself before the Royal Commission on Labour on June 14, 1892, as follows: "So far as our rules are concerned we do not recognise piece-work; that is, we do not allow it being introduced. . . . We allow our members to work it in shops where it does exist, however; we should not do it if we could help it, but we do not approve of it, because we find from practical experience that it reduces the wages. It has always a downward tendency, and I know of no instance in which employers have raised the piece prices. I might say that at one locomotive shop in Manchester, during these past 15 years, the piece prices have

on the fear that the employers, once they have ascertained by means of this system how much work a man is really capable of doing, will turn this knowledge to their own advantage, with the result that more work will be required for the same wage. Is there any real foundation for this? With sufficient competition among the *entrepreneurs*, it will be impossible for capital to appropriate the whole of the advantages arising from the increased efficiency of labour; this would be possible only in the event of supply being artificially restricted in the manner shown in our illustration, but also with the results there set forth. Appeal is frequently made to the fact that in certain trades piece rates remain unchanged for a long time, and are sometimes even reduced; but what does this prove? Every advance in methods of production will lead to reduction of the wages for piece-work; it does not follow from this that the workpeople will earn less and less—in fact, their earnings may increase considerably, while piece rates fall. We have already seen that between 1819-21 and 1880-82 the average annual production of cotton yarn per operative in England rose from 968 to 5,520 pounds. Suppose, now,—we do not know the exact figures,—that within that period piece rates had fallen in the proportion of 285 to 100: even then wages would have doubled, because the production per operative rose in the proportion of 100 to 570.

Another mistake made by opponents of the piece wage system is, that they confine their attention too much to what takes place in their own immediate circle. If, for example, owing to the application of the piece wage system, locomotives were to become cheaper, such persons would say that they failed to see what benefit they derived from the fact, as they are not in the habit of buying locomotives. True: they are not in the habit of buying locomotives; but they are in the habit of buying other things which are produced under the piece wage system, and the working man certainly gains when such things become cheaper. He complains of having constantly to work harder; but, if every one works harder, the

been reduced 10 per cent. on three different occasions, so that in 15 years the piece-wages have been reduced 30 per cent. altogether. (See Group A, Question 22,797.) See also the answer to the next question.

aggregate result of production increases, and an hour's labour procures the workman more of the enjoyments of life than it did before. He complains that the employers appropriate the fruits of his increased exertion. Are we to take it, then, that there is no longer any competition among employers, or that it has become less keen?

In speaking thus we do not forget what has been demonstrated in the chapter dealing with interest, namely, that a general improvement in the results of production benefits the capitalist as well. In so far as the improvement results in the lowering of prices, it brings advantage to all whose money incomes have not decreased; and so long as capital in the aggregate does not increase, the capitalist will be amongst these. In fact, he will gain independently of the fall in prices. The higher wages rise, the greater the amount of capital required for the payment of wages; for, as we have repeatedly observed, the results of production always consist of "future goods," while wages consist of "present goods"; when more of the latter are required, interest rises. Thus the capitalist shares in the advantages of the increased labour performed by the workman. But the workman also shares in the advantages resulting from improved methods of production; and he benefits, too, when, owing to the zeal and commercial acumen of *entrepreneurs*, an increased sale is found for the product in distant countries, or when, through more timely attention being given to changes in taste, the product is adapted to meet a wider range of wants. It is to the advantage of capital that much and good work should be performed, but it is to the advantage of labour—and not of labour alone—that capital should be used with discernment.

If the views here set forth are correct, then we ought to find that wages are highest in those countries and districts where the workpeople perform the greatest quantity and the best quality of work. So far as can be ascertained, this is really the case. Many comparative inquiries have been made with reference to this point, and all of them have led to the conclusion that high wages do not mean dear labour, and that in many cases what is apparently the dearest is really the cheapest labour. Even in ADAM SMITH'S day this fact

was noticed, for that author remarks that where wages are high "we always find the workmen more active, diligent, and expeditious than where they are low."¹ But it was THOMAS BRASSEY more especially who brought this matter into clear relief in a book which appeared in 1872, entitled *Work and Wages Practically Illustrated*. The author, son of one of the largest railway contractors of his day, supplies many details from the rich fund of experience gathered by his father. When the Grand Trunk Railway was being constructed in Canada, English labourers had to be paid from 5s. to 6s. per day, while local labour was to be had for 3s. 6d.; and yet English labour was the cheaper. In British India the daily wage amounted to from 4½d. to 6d., but the cost of constructing a mile of railway was as great there as in England. BRASSEY mentions a work carried out in France, in which French, Irish, and English labourers were employed side by side at wages of 3, 4, and 6 francs per day respectively; here again the result proved that low wages may mean dear labour. Comparisons have also been made between wages paid in different parts of the same country. In *English Land and English Landlords*,² BRODRICK points to the great differences in the weekly wages of agricultural labourers in the south, north-east, and extreme north, the rates paid being 13s., 18s., and 21s. respectively. He assures us that these differences in the price of labour correspond nearly to differences in its efficiency. A large number of other facts of similar import are to be found in SCHOENHOF's *Economy of High Wages*, a work to which allusion has already been made, and which is based on extensive inquiries carried out both in the United States and elsewhere; also in L. BRENTANO's little work, *Ueber das Verhältniss von Arbeitslohn und Arbeitszeit zur Arbeitsleistung*, the second edition of which appeared in 1897. The matter no longer admits of doubt; the teachings of theory as to the effect of the efficiency of labour upon the price of labour are being confirmed by experience all the world over. We cannot afford space for more than these few remarks concerning the inquiries which have yielded so important a result.

¹ *Wealth of Nations*, Book I. chap. viii.

² London, 1881, p. 229.

That result is important for a further reason, however; it suggests a question which claims our attention not only on theoretical, but also, and indeed more especially, on practical grounds. Wages are influenced by the efficiency of labour; but do not the wages themselves influence the efficiency of labour? Workmen who get through a large amount of labour in a short space of time take plenty of good food; experience shows this to be the case everywhere, nor can it be regarded as a mere coincidence, for good food renders great exertion possible. But good food presupposes high wages. If BRASSEY had paid his English labourers the three-franc rate with which the French labourers were content, the labour of the former would soon have been worth no more than three francs per day. It will be seen that we are here approaching a new aspect of the wage problem. Owing to the fact that a price is paid for labour, just as a price is paid for merchandise, labour is frequently ranked with merchandise. There are cases where no harm results from this error, but this is not one of them. A horse loses none of his working powers by being hired for a low price, but when the wages of a strong and diligent workman are reduced to any great extent, his working powers become impaired after a while. By regarding labour as if it were a merchandise—and a lucid exposition of the wage theory is perfectly possible without doing so—we obscure our view of more than one of labour's distinguishing features. Labour and merchandise have many points of resemblance, but they have points of contrast as well,¹ and one of these has just been indicated.

But now, what theory can we propound? Some of the writers who have studied this subject have been hasty in their judgment, and the first to err in this respect was ADAM SMITH. "Where wages are high, we always find the workmen more active, diligent, and expeditious than where they are low." This he regards as proving, not that efficiency has a favourable effect upon wages, but that high wages render labour more efficient. "A plentiful subsistence," he says, "increases the bodily strength of the labourer; and the comfortable hope of bettering his condition,

¹ Cf. Dr. E. FOKKER's memorandum relative to the labour contract, in *Handelingen der Juristen-Vereeniging* (1894), vol. i. p. 173 *et seq.*

and of ending his days perhaps in ease and plenty, animates him to exert that strength to the utmost." What authority had ADAM SMITH for this contention; what evidence had he to support it? It may be quite true; but this does not follow from the facts observed.

Neither does it follow from what has just been said as to the necessity for maintaining the high wages in order that the state of high efficiency may be maintained. It is one thing to maintain; another to create. The working classes of a country have gradually reached a high standard of living; their working power has risen with their wages. It is clear that this increased working power cannot be maintained if wages fall; but it does not follow from this that the raising of wages will always and under all circumstances cause increased working power to be developed. If we say that it does follow, we assume that higher wages will under all circumstances be spent in such a manner as will conduce to the development of greater working power. A high wage is certainly a requisite for efficient labour, but without proof we cannot concede that it is the sole requisite. In fact, there are good grounds for doubting that it is the sole requisite.

It has been contended that when labourers of deficient working power settle among a very industrious and highly paid population, they soon become capable of earning as high a wage as their new fellow-workers.¹ Even assuming—as we do for the moment—that this rule has neither many nor important exceptions, it lends no strong support to the theory which regards the high wages as the cause of the great working power. Getting through a large amount of work in a short space of time is partly a matter of custom, and labourers

¹ "In England I frequently heard it said that labourers brought from Ireland usually break down after the first week's trial; had then, living with friends, to first get used to the English standard of life, and feed up in order to be able to do work at the English rate. Gradually, in keeping with their better feeding and living, they become good and as strong workmen as the English. Now, in American mills the very same holds good" (J. SCHOENHOF, *op. cit.* p. 30).

On the other hand, BRODRICK (*English Land and English Landlords*, p. 229) says that "labourers assisted to emigrate northwards in quest of higher wages have frequently been compelled to return from inability to give the day's work required to earn those wages."

who have lately immigrated are apt to conform very quickly to the customs of their new environment. But if great bodily strength be necessary to enable them to do this, then those only will earn the high wages who already possess such strength, or succeed in acquiring it by dint of good feeding. This is necessarily so where wages are reckoned according to the amount of labour performed; where they are reckoned according to the duration of the labour, it is not to be expected that the physically weak will be able to earn as much as the physically strong. The reports dealing with this subject, if read with intelligence, will be found to contain material for proving that efficiency influences the price of labour, but not that the efficiency of labour is influenced by the price.

Let us frankly admit that we have here approached one of the most interesting aspects of the wage problem, but, at the same time, one upon which little light has, as yet, been thrown. If it were an established fact that the raising of wages was always and unconditionally a means of proportionately raising the quantity and quality of the labour performed, then the social problem would, to a great extent, be solved. But this is far from being the case. There is no lack of data for proving that the efficiency of labour determines its price, but there certainly is a lack of data from which it would be possible to conclude with certainty that the efficiency of labour is affected by the price. BRASSEY found the Canadian labourers dear at 3s. 6d. per day; he preferred English labourers, although they cost him from 5s. to 6s. per day. He was able to get British-Indian labourers for 4½d. to 6d. per day, but he found that he was not getting his labour cheap at that rate. Had he been desirous of throwing light on the subject which we are now considering, he would have tried the effect of paying the highest rates to all those underpaid labourers, but of course he saw no reason for making such an experiment.¹ Nor do the data furnished by

¹ It is true that at page 67 of his book, BRASSEY says as follows: "At the commencement of the construction of the North Devon Railway, the wages of the labourers were 2s. a day. During the progress of the work their wages were raised to 2s. 6d. and 3s. a day. Nevertheless it was found that the work was executed more cheaply when the men were earning the higher rate of wages than when they were paid at the lower rate. Again, in London, in carrying out a part of the Metropolitan Drainage Works in Oxford Street,

SCHOENHOF or BRENTANO take us any further. Nowhere in their writings do we find anything more than suffices to prove that where labour is efficient, wages are high ; but as to which is cause and which effect, we find nothing to guide us. What we should like would be, to know of a large number of examples of wages having been increased—whether by way of experiment as a means of solving our problem, or by the free play of supply and demand—and having had the effect of rendering the labour for which they were paid more efficient. In order to preclude all error, the examples would have to be such as to leave no doubt that the increased efficiency had been caused by the increase in wages and by that alone. If at the same time new machinery had been introduced, or a new wage system adopted, there would be no certainty that the desired result had been brought about solely by the increase of wages. Examples of this kind are lacking, however, and it is to be feared that they will always be so. Various *entrepreneurs* have shown their willingness to make experiments with regard to the hours of labour ; we can hardly expect to find them equally ready to make experiments with regard to wages. An *entrepreneur* who is prepared to devote a larger sum to the payment of wages, in order that he may get more efficient labour, will do so in such a way as to attract the best workmen and bind them to his enterprise. His object in venturing upon the experiment will be, not to

the wages of the bricklayers were gradually raised from 6s. to 10s. a day ; yet it was found that the brickwork was constructed at a cheaper rate per cubic yard, after the wages of the workmen had been raised to 10s., than when they were paid at the rate of 6s. a day."

If we are to understand by this that the higher wage was paid to the same people, and that their increase in earnings was not the result of the introduction of piece-work or of some other improvement in the wage system, then the statement does indeed embody the results of a remarkable experiment. But is it certain that either of these things was meant ? All the succeeding passages have reference to labourers of different nationality. Russians are compared with Englishmen, Englishmen with Irishmen, and on page 74 the author says : " This I say, that the result of all experience shows that, with proper supervision, and with an equitable scheme of prices for piece-work, the best-paid workman does more work for a given sum of money than the under-paid and therefore underfed labourer can by possibility accomplish." There can be no doubt as to the favourable effect which piece-work has upon the efficiency of labour ; but this is not the obscure point that wants clearing up here.

illustrate some scientific truth, but to discover whether the scale of wages which he has hitherto been applying is a proper one. And we have to remember another thing. Good results may follow at once from the shortening of the working day; as, for instance, in a case where little work was being done in the last hours of a very long working day, or in the first hours of a day which began early. There may be many *entrepreneurs* who have faith in the tenet that low wages are as unfavourable in their operation as excessively long hours; not many, however, will be ready to believe that an increase of wages will at once exercise a favourable influence upon the quantity and quality of labour. Most of them will certainly go no further than Professor MARSHALL, who says that "an increase of wages, unless earned under unwholesome conditions, almost always increases the strength, physical and mental, and even moral, of the coming generation."

Are we then quite in the dark with respect to this question? Will neither experience nor reflection enable us to say anything as to the influence of wages upon efficiency? Practically all that can be said has, we think, been said by Professor MARSHALL in the words just quoted. We regard this truth as one of very great importance. In the life of every nation there occur periods in which wages rise, and in such times people ask themselves whether the improved wages will be maintained. The circumstances may change; the birth-rate may increase owing to early marriages; the death-rate, more especially among children, will certainly be reduced in consequence of the increased welfare. It is in some measure reassuring to be permitted to suppose that, besides the actual or possible causes which tend to reduce wages to their former level, another cause is operating, slowly but persistently, in a better direction. The standard of living is being raised. The population is growing stronger in every respect. As far as determined by quality and quantity, its labour is acquiring higher value.

Professor MARSHALL's statement is not too strong. An increase of wages may take one of three forms. The money wage may rise while the prices of necessaries remain the same, or it may remain the same while those prices fall, or—best of all—it may rise while most things become cheaper. In

Holland, during the latter half of the nineteenth century, the increase in wages has taken different forms in different parts of the country. Money wages have not risen steadily in all parts of the kingdom, but the prices of necessities have certainly fallen everywhere. House rents have gone up in the larger towns, it is true; but, as a set-off, money wages have at the same time risen remarkably in those towns, so that they also have experienced the benefits of the improvement. We may therefore conclude that real wages have increased in Holland. What use has the working population made of the increase? It is a very common thing to hear people say that an increase of wages only leads to increased drunkenness; is this assertion borne out by statistics? The annual consumption of spirits (50 per cent. alcohol) per head of the population in Holland in 1870 was 1·64 gallon; as a direct result of the increase of wages which, a little later, became very considerable, the consumption of spirits rose to 2·18 gallons in 1876. Since then, however, there has, on the whole, been no further increase in the consumption of spirits; for the period 1877-91 the average yearly consumption was practically the same as in 1876; for the period 1882-86 it was 2·04 gallons; and for the period 1887-91, 1·96 gallons. Compare with this certain figures obtained in the course of an inquiry carried out in 1895 by the Dutch Central Statistical Commission¹ as to the yearly consumption of food-stuffs in Holland. After deducting the quantities used for distilling and brewing purposes and for the feeding of cattle, the annual consumption of different kinds of cereals per head of the population was found to have been as follows:—

CONSUMPTION OF CEREALS PER HEAD OF POPULATION.

PERIOD.	Wheat.	Rye.	Barley.	Buckwheat Flour.	Rice.
1852-56 .	1·18 <i>bushels</i>	2·97 <i>bushels</i>	33·51 <i>lbs.</i>	37·84 <i>lbs.</i>	14·63 <i>lbs.</i>
1867-71 .	2·12 „	—	38·92 „	36·08 „	13·77 „
1887-91 .	3·55 „	3·16 „	35·66 „	22·00 „	26·60 „

The consumption of buckwheat flour has decreased, as we see, its place being taken chiefly by rice. But note the increase

¹ Cf. the *Bijdragen* of that Commission, Part II. The Hague, 1895.

in the consumption of wheat! Taking wheat and rye together, we find an annual consumption per head

of 4·15 *bushels* in the period 1852-56, and
 „ 6·71 „ „ „ 1887-91,

that is to say, an increase of 60 per cent., while the consumption of spirits only increased by 19 per cent. between 1870 and the period 1887-91.¹

The record of what our experience has been in Holland—and we might add to it that of other countries—bears out Professor MARSHALL's proposition, to which we should no more venture to ascribe anything of the character of law than does that author himself. Professor MARSHALL expresses himself very cautiously, and he has good reason for doing so. Among a people in a backward state of development, an increase in the daily wage might have no other result than that of increasing extravagance, and it is quite possible that it would not even result in any increase in the incomes of the labourers, who, after earning good wages during a portion of the week, might choose to spend the rest of the week in idleness. And who will venture to assert that neither of these things is possible in the case of a European population? If the increase of wages is to lead to increased efficiency, it must go hand in hand with a raising of the standard of living, and this, as we know, is very closely related to the moral condition and the stage of civilisation which a people has reached. Increase of wages, unaccompanied by a raising of the standard of living, is neither in an economic nor in any other sense useful, and leads to degeneration and demoralisation. An increase of wages does not operate beneficially of itself. We can convince ourselves of this any day. There are many individual cases where an increase of wages is productive of

¹ One cannot help establishing a connection between the improvement which has taken place in the condition of the Dutch population in the matter of feeding and the steady improvement shown by the annual returns of the measurements of recruits. The percentage proportion of recruits of different ranges of height were as follows in each of the years 1870 and 1894 :—

	Under 5 ft. 1 inch.	5 ft. 1 in., but under 5 ft. 8 in.	5 ft. 8 in., but under 5 ft. 7 in.	5 ft. 7 in. and over.
1870 .	9·32 per cent.	13·91 per cent.	51·78 per cent.	24·99 per cent.
1894 .	3·92 „	9·16 „	51·84 „	35·08 „

But no doubt other causes too have contributed towards this improvement.

nothing but harm, where, instead of raising, it actually lowers the standard of morals and civilisation. Why is it that it has not done so to any great extent in our own time and amidst our own surroundings? Why is it that, in Holland, we have found the working classes showing more and more concern about the manner in which they are housed and clothed, and about making provision for their own future and that of their families? How is it that we have found them showing more and more interest in matters affecting the public weal? A numerous aristocracy, as it were, of labour has been formed, the members of which, both men and women, are clearly distinguishable, though not separated by any wide gulf, from the general mass of workpeople. How did this aristocracy originate, and why are its ranks being constantly recruited, as they evidently are? Here we must not overlook the moral forces operating for the general good in our midst—forces which, notwithstanding great diversity in the motives as well as in the means applied by those through whom they find expression, do, nevertheless, all help to combine something higher with the economic progress which is being achieved. This higher something is precisely what is indispensable for the maintenance of the economic progress itself.

The wages question has different sides. At times it presents itself as a mathematical question, and such it really is; it contains factors the significance of which can only be ascertained by measuring and calculating. But mere measuring and calculating do not suffice to solve it; the wages question has another side—a side which eludes the mathematician, and causes the economist, *qua* economist, infinite perplexity—to which, however, he must give full attention if he would avoid a very serious error in the results of his investigation. Labour has much in common with merchandise; we must repeat this for the benefit of those who like to import all kinds of misty, we had almost said semi-mystical, elements into the strictly economic part of the wages question, and who, under the pretext of infusing new life into science, present us with old errors in a new guise. But there is a point at which the maintenance of the comparison between labour and merchandise becomes an impediment to the proper understanding of the causes which regulate wages. That point we have endeavoured

to indicate. It is where material welfare becomes dependent upon welfare in the higher sense.

Among those who, from the nature of their calling, exercise a great influence upon the material and moral welfare of the working classes, there are many who are fully alive to the close connection that exists between the two. The number of manufacturers who have made it their fixed purpose to increase wages by degrees, and who endeavour to achieve that purpose by right means, is no longer small. Knowing that efficiency determines wages, they apply a piece and day wage scheme, which shall prove a constant incentive to work. They endeavour, at the same time, by providing schools and good dwellings, and by various other means, to increase the knowledge, foster the development, and raise the standard of living of the workpeople. Thus they take precautions against the increased incomes being spent in harmful ways. Those incomes then become transformed in part into new working power, and new recruits are added to that aristocracy of labour to which allusion has just been made, and in the steady growth of which, more than in anything else, the solution of the social question is to be sought. In this way the interests of all are promoted. The shortsightedness of the *entrepreneur* who regards labour as so much merchandise reacts not only upon himself, but frequently upon others as well; for it may result in a lowering of the standard of living at the same time that wages are rising.

When we take all these things into consideration, we see that it is impossible to accept without reserve the theory held by ADAM SMITH and a few writers of more recent date, that wages exercise a great influence upon the quantity and quality of labour. ADAM SMITH himself merely stated that theory, without adducing a single clear argument in its support, and no sooner do we set about trying to supply this omission than we come upon facts which show that the theory cannot be strictly true. ADAM SMITH's proposition must be ranked with the one which maintains that the invention and introduction of machinery must ultimately lead to an increase of wages. Both are true, provided certain conditions are fulfilled. Machinery can never raise wages automatically; neither can an increase of wages ever automatically improve the quantity and quality of labour.

§ 8

Inequality in Wages

It now remains for us to explain the inequality observable in the wages of any given time. It is of a threefold nature. There is inequality in the wages paid for work of the same kind, for work of different kinds, and for work in different localities. Inequality of the first kind has already been to a great extent explained by what has been said in the foregoing section as to the influence of efficiency upon wages. Seeing that this influence operates, and that all workpeople engaged in the same trade and occupying the same rank in that trade do not perform the same quantity and quality of labour, there must inevitably be inequality in their wages. Little more remains to be said here, if we confine our views to artisans and those of humbler standing. We might perhaps add that successful *entrepreneurs* sometimes pay higher wages than others; but that apart, and so far as concerns the class of workpeople whom we are now considering, the wages of the individual depend upon the skill and working power which he displays. There is every reason to suppose that this also explains the inequality in wages as between men and women in industrial employments. If the labour of both were equally efficient in every respect, the demand for female labour would increase until a point had been reached at which its employment ceased to present any advantage over that of employing male labour.

In the case of intellectual, as distinguished from manual labour, however, the inequality of wages is not quite so easily explained. The value of intellectual labour is not determinable by any process of weighing, measuring, or calculating. There is much more scope here for individual estimate, and this is influenced by a variety of considerations. A teacher, author, or artist is not more liberally remunerated in proportion to the extent to which his work is really better than that of others in his profession, but in proportion to the extent to which it is better in the opinion of the public, and every one knows how faulty, not to say wrong, that opinion may be. Painters whose works fetch high prices at the present day have been

so little appreciated in their lifetime that they have suffered absolute want. Trashy literature often has an immense sale, while books really worth reading remain unsold. It is not always the artistic or scientific value of a work that determines its commercial value, and it is upon its commercial value alone that the author's remuneration depends. Services are rewarded according to their importance in the eyes of those to whom they are tendered. The time and effort which they may have cost count for nothing. A commission agent has often more work in selling a small, than he has in selling a large quantity of goods; still, as commission is reckoned according to the money value of the things sold, he earns more in the latter case than in the former, because in the second case his labour is commercially more valuable.

Here we have one of the less pleasing aspects of the social structure. The most unsatisfactory results sometimes follow from the application of commercial principles to the remuneration of intellectual labour; we find in some cases excessive remuneration, in others far too little. It is almost as if a premium were offered for what is vapid, or even destructive of morality, and a penalty attached to serious endeavour to fulfil the requirements of science or art. It is the easiest thing possible to explain the inequality in the wages of intellectual labour upon economic grounds; it quite fits in with a correct exposition of the theory of value. The labour that fetches a low price really possesses a small "marginal utility." By saying this we even show with special clearness the peculiar economic signification of the word "utility." But when we have thus stated the facts, it is anything but easy to feel satisfied with them.

For the purpose of explaining the inequality in wages paid for work of different kinds, almost all of the foregoing observations are relevant. The services for which the highest wages will be paid are those for which the demand is great, but of which the supply falls short of the demand. If the demand be small and the supply abundant, nothing but the goodwill of the employer can enable the wages to be high. Many a clerk earns more than a magistrate, many a schoolmaster more than a burgomaster. High appointments, besides being scarce, are sought after by people who would not care to

fill humbler appointments even though the latter were more lucrative. It is not pecuniary advantage alone that such people desire; they want an occupation befitting their rank and station, and public opinion operates—sometimes very strangely—in limiting their range of choice. We should obtain a wonderful classification, were we to draw up a list of the appointments which it is deemed possible, and of those which it is deemed impossible, for a man of good family to fill without losing caste, as it were. Then, again, the wages are not always regulated by bargaining. It very frequently happens that the sum to be paid for the performance of a certain work, or the salary to be attached to a certain post, is fixed in advance by the resolution of some Board or Local Authority, or by Act of Parliament, and that steps are not taken till afterwards to find persons who are willing to undertake the work or fill the post. It would be a very small remuneration indeed that failed to attract some candidates; but how poorly qualified such candidates sometimes are! Still, as those with whom the giving of the appointment rests are tied to a certain sum, they have to take the best man they can get. This is why many appointments in the public service are held by people who would otherwise have to occupy much humbler positions. The low rate of remuneration attached to certain important posts is entirely due to the lack of judgment of those by whom the amount has been fixed, a default which is more far-reaching in its results than the superficial observer might think. There are countries where very influential appointments are sometimes obtained by persons little qualified to fill them, and where this is to a great extent due to the poor salaries attached to those appointments. In such countries it constantly happens that financial considerations alone deter properly qualified men from accepting political, administrative, or judicial posts, so that there is no alternative but to appoint less qualified men; and so we find people who possess neither knowledge nor experience called to fill posts in which both are primary requisites. It is scarcely possible to exaggerate the disadvantages that result from this, more especially now that the public service is no longer the only career which affords opportunities of earning distinction and esteem.

When wages are regulated in the manner just indicated, there is also the possibility of their being fixed too high. The disadvantages that follow from this are obvious, but they are of a different order from those just referred to. They consist in certain persons enjoying more than their just share, having regard to the value of the services which they render. On the other hand, there is the advantage of being always able to find suitable persons when a vacancy occurs. If we were asked to give instances of countries which have erred in one or other of these respects, we should mention Holland and England. In Holland we usually err on the side of economy in fixing the salaries of high officials; in England the salaries of such officials are sometimes inordinately high.

But let us go back to wages in the more restricted sense of the word, to the wages of manual labour. Here we find the differences between the wages paid for different kinds of labour to be less than we should have expected. Of course a carpenter, a mason, a painter, and a smith, all of equal standing in their respective trades, do not always earn equal wages; but we cannot help being surprised that the difference in their wages is not much greater than is actually the case. For, as MARSHALL rightly observes, the person who, when choosing a trade, considers the state of the market, is guided by the state of the market at that particular time, and we know how liable the market is to change. Besides, the choice of a trade is usually made at a time of life when more thought is given to other matters than to the question of future earnings; a boy chooses his father's trade, or the trade which he fancies best, or in which he happens to be able to find an opening. It may be that the causes which would produce great differences in wages operate with a certain constancy in such a way as to counteract each other. In every field open to statistical inquiry we find uniformities—a certain constancy of phenomena, and we might regard this as a reason for supposing that there is an equal amount of relative constancy in things that elude the statistical inquirer. Or is the explanation of the comparative slightness of the difference in the wages of different kinds of labour to be found in the short duration of apprenticeships, so that the supply of labour

answers much more readily to the demand than is apparent to the superficial observer? It may also be that the demand for labour is very readily affected by the price, so that any partial increase of wages which causes great disparity between the wages of different trades, speedily reaches its limit. We cannot say what the real explanation is; we only can mention what may be regarded as a possible explanation.

Lastly, a word about the inequality in wages as between different localities. In so far as concerns money wages, the difference is due in the first place to difference in the cost of housing and food. If a workman can earn three shillings a week more in a town A than in a town B, but house rent is three shillings a week more in A than in B, there is clearly no inducement for him to go to the town where the wages are higher. It would be wrong, however, to suppose that all differences in wages as between different localities were due to no other cause than the one just mentioned. The differences are so great and of such a nature as not to be explainable on that ground alone. Not only the money wages, but also the real wages—the wages expressed in goods and comforts—of workpeople of equal working power, differ in one locality as compared with another.

This is all the more remarkable considering that there are two ways in which it is possible for all such difference to disappear: capital can go in search of cheap labour or cheap labour in search of capital. In districts where wages are comparatively low, new enterprises may be started, or many of the inhabitants of such districts may migrate to places where wages are higher. Either of these means would tend to equalise wages; in fact, both have been instrumental in removing many disparities. Low wages do really attract capital, and high wages attract population. The former is exemplified by the rise of industrial enterprise in certain parts of Eastern Holland, while numerous instances of the latter are furnished by the striking growth of certain towns referred to in our chapter on house rent. We need but mention that, between 1801 and 1861, the population of Manchester increased from 94,000 to 460,000, and that between 1831 and 1861, that is to say, in a space of 30 years,

the population of the whole of Lancashire very nearly doubled itself. But why do not these two causes always operate strongly enough to do away with the differences which we are now considering?

In order to get at the explanation of this, we must consider, firstly, the reasons which deter capital, and secondly, those which deter labour from migrating.

Firstly, as regards capital. The geographical situation and the nature of the population inhabiting a locality are not immaterial to the success of an enterprise established in that locality. All places do not present equal facilities in the matter of placing the raw material at the works, or sending off the manufactured product, or procuring coal or other requisites for production. Where the advantage of cheap labour is outweighed by disadvantages in respect to other matters, there is no inducement for the capitalist to avail himself of it. Again, the *entrepreneur* usually considers the nature of the population, their peculiarities and special capabilities. There are districts in which certain talents are, as it were, localised, where those talents are inherited; the diamond-cutters of Amsterdam, the watchmakers of Switzerland, the wood-carvers of Siena, are examples. And capital is always reluctant to migrate to distant countries. The capitalist needs special incentives to induce him to employ his capital in distant countries, and still greater incentives to induce him to entrust it to the keeping of others there. He is more disposed to content himself with a moderate profit at home than to risk his property in an enterprise that promises to yield somewhat larger returns, but has to be carried on in a distant part of the globe. It is true that in these days there is considerably less reluctance on the part of capital to migrate to distant countries than there was before, but it still requires the incentive of special gains; and so long as this is the case, the cause of equality in wages which we are now considering will continue to operate with little effect.

The reasons which deter the workman from migrating are equally cogent. Statistics show that very special circumstances are required—such, for example, as prevailed in Ireland after the year 1845—in order to cause migration to take place

upon anything like an extensive scale. The population migrates, it is true, but generally within a comparatively small area. Thus, as shown by the Prussian census of 1890, of every 100 of the population—

53·9	were born in the town or village in which they were residing,
15·8	„ „ another town or village, but in the same district,
17·4	„ „ another district, but in the same province,
9·7	„ „ another province, but nevertheless in Prussia,
3·2	„ out of Prussia. ¹

Similar results were shown by the Dutch census of 1889. It was found that of every 100 of the population whose place of birth was known—

65·40	were born in the town or village in which they were residing,
21·67	„ „ another town or village of the same province,
11·03	„ „ another province of the kingdom,
1·90	„ abroad.

These figures show that attachment to the place of birth, though not a serious check to migration as between neighbouring localities, does seriously check migration to distant places. For this reason it is possible for the difference in wages as between different countries, and also as between different parts of the same country, to increase with the distance.

A third cause tending to equalise wages has yet to be mentioned: namely, difference in growth of population; but this cause also operates imperfectly. It might be supposed that wherever wages—real wages—were higher than elsewhere, there also the birth-rate would be higher and the death-rate lower. So far as the death-rate is concerned, this is true, inasmuch as increase of wealth means better food, clothing, and housing conditions. But the birth-rate is frequently higher in districts where wages are low than in

¹ Here are a few figures relating to other countries:—

	Austria (1890).	Hungary (1891).	France (1891).
	Per cent.	Per cent.	Per cent.
Born in the town or village in which they were residing	65·2	78·6	56·3
Born in another town or village in the same district	15·0	15·6	25·0
Born in another district	18·1	9·3	16·4
Born abroad	1·7	1·5	2·3

districts where they are high. In Switzerland wages are certainly higher, on the whole, than in Italy; yet in the former country the average annual birth-rate (exclusive of still births) per 10,000 inhabitants was only 277 between 1884 and 1890 as compared with 379 in Italy during the same period. And in no part of the kingdom of Italy is poverty so prevalent as in Sicily, the very part where the growth of the population is greatest.¹ The standard of living varies between one subdivision and another even of such a small country as Holland; consequently the inequality in wages as between different localities does not disappear so quickly as might be expected by merely having regard to the connection between poverty and the death-rate.

From all this it will be seen that of the three causes which tend to remove the inequality in wages as between different localities, none is strong enough to do so by itself. The joint operation of these causes is capable of doing much in that direction—but only as between countries and districts which are contiguous to each other, which have a common language, a common form of religious worship, the same manners and usages. It stands to reason that improved means of communication help to remove the inequality. When the Prussian census was taken in 1871, 56·83 per cent. of the population were found to be residing in the place of their birth; in 1890 the percentage had fallen to 53·9. Between 1879 and 1889 the corresponding figures fell from 67·25 per cent. to 65·40 per cent. in Holland. But those born out of Prussia, numbering 2·49 per cent. of the population in 1871, had not risen beyond 3·2 per cent. of the population in 1890; while those born out of Holland, numbering 1·88 per cent. in 1879, had not risen beyond 1·90 per cent. of the population in 1889. It appears, therefore, that, as between country and country, this cause does not operate much more potently than formerly. Migration still consists for the most part of circulation of the population within the confines of the same country or between neighbouring localities. In Bâle it was found that of every 100 persons born elsewhere than in the place in which they were residing in 1888, 16·7 were born within a distance of two (German) miles, 50·2 within a

¹ See *De Economist* (1895), p. 478.

distance of over two but under ten miles, and only 33·1 at a distance exceeding ten miles from their then place of residence. In Oldenburg, the corresponding proportions were 21·8, 42·1, and 36·1 per cent. So far as could be ascertained, the distances from which the settlers in villages had come, appeared in the great majority of cases to be even much smaller. As the result of an inquiry carried out in three rural parishes in the Duchy of Oldenburg, it was found that of the new-comers 95·6 per cent., 60·1 per cent., and 83·5 per cent. respectively had come from places distant not more than two (German) miles.¹

Probably among the causes which tend to remove inequality in wages as between different localities in one and the same country, migration stands first. This may be deduced from the fact that in districts in which wealth is declining the density of the population always diminishes, whereas in districts in which opportunities of earning an income are growing more plentiful the population increases in density. We will return to this subject in a later part of the present work, and will then quote statistics in proof of what has here been stated.

¹ These figures are taken from Part VI. of *Die Entstehung der Volkswirtschaft, Sechs Vorträge*, by Dr. KARL BÜCHER, Tübingen, 1893. See also Dr. A. WIRMINGHAUS: *Stadt und Land unter dem Einfluss der Binnenwanderungen* (in Hildebrand's *Jahrbücher*, Part LXIV. pp. 1-34 and 161-182); also A. MARKOW: *Das Wachstum der Bevölkerung und die Entwicklung der Aus- und Einwanderungen, Ab- und Zuzüge in Preussen und Preussens einzelnen Provinzen, Bezirken und Kreisgruppen von 1824 bis 1885*, Tübingen, 1889.

CHAPTER VII

ON PRICE

§ 1

Introduction

By way of concluding Part I. and preparing the way for Part II. of this treatise, we propose now to inquire into the causes which determine prices.

This question may be approached from two sides. Approaching it from one side, we should confine our efforts to ascertaining what determines the prices of things in relation to each other. Our sole endeavour in that case would be to make it clear why, if article A costs one shilling, article B must cost two shillings, and we should not trouble ourselves with the question why article A costs one shilling and not two shillings, say, or three shillings; in other words, we should not inquire into the causes which influence the ratio of exchange between money and goods.

When, however, we approach the same question from the other side, we ask ourselves, What regulates the general level of prices, that is, what regulates the purchasing power, the value in exchange of money? In some European countries half a sovereign goes as far as a sovereign will go in others; the purchasing power of money is not everywhere the same. How is this to be explained? And to what are we to attribute the fact that there are times when there is a general decline and others when there is a general rise in prices? These questions carry us into a sphere of ideas which we must be careful to distinguish from that just mentioned. They have no refer-

ence to the relation between the prices of different things, a relation which would not necessarily change if all things became dearer in an equal degree in relation to money; they have reference to the ratio of exchange between goods and money, a ratio which is expressed in the general level of prices.

We propose to discuss firstly the prices of things in relation to each other, that is to say, the value in exchange of goods. We have touched on this subject more than once already. We have inquired into the origin of value in exchange, into the effect of agricultural rent on corn prices, into the effect of changes in the rate of interest and in the rate of wages on prices of goods in general, into the connection existing between price and demand, also into the causes of that connection. The reader is therefore already more or less conversant with the matter of which we now propose to treat, so that it will not be necessary to set down everything that might serve to make it clear. All we propose to do here is to bring into relief certain truths to which attention has not yet been directed, or at any rate sufficiently directed; to supply what has hitherto been wanting in order to render our treatment of the subject as complete as possible.

It is not advisable to search for a formula embracing all the causes influencing the relative prices of things. Such a formula could certainly be found, but it could hardly be useful. In order to be correct, it would have to be complete; but if it were complete, it would be too cumbrous for use. Or else it would have to be worded in language so elastic and so vague that it would be of no value for the purpose of throwing light on any particular case.

On the whole, there is little help to be got from general formulæ in the domain of economics. We have to face the fact once and for all that society is *not* constructed on simple lines. The complexities arising out of exchange are both numerous and varied, and they all affect prices. We have here, as it were, the knot in which all the threads are united. No short formula can teach us how to unravel this knot.

The principal reason why any general proposition containing a complete statement of all the laws governing the formation of prices would have to be very cumbrous, lies in

the variety of the circumstances under which supply takes place, and in the connection that frequently exists between the demand for one kind of goods and that for another. Some goods are produced under conditions of a virtual or legal monopoly; others may be produced by any one, practically. In the case of some goods the cost price in respect to labour and employment of capital is practically the same for all producers; in the case of others it varies extremely as between one producer and another. In the case of some goods the whole supply comes from one country; in the case of others it is the product of different countries. All these things exercise an influence of some kind, and it will be our business to inquire into the nature of that influence.

Again, there is frequently a connection between the demand for one kind of article and that for another. There is a connection between the demand for wool and that for cotton, between the demand for wheat and that for rice, between the demand for stocks and that for land; and there may be a connection—a very close connection, in fact—between the demand for gold and that for silver. The conditions under which two articles can be acquired by labour may be precisely the same, and yet those articles may fetch very unequal prices, owing to the cause mentioned.

What we have to seek for, therefore, is not a general formula, but a series of truths. Through not adopting this method, and through failing to keep in mind the multiplicity of the causes which influence the relative prices of things, important economic questions have frequently been seriously misjudged. For example, the general adoption of bimetallism, when it was still possible, was frustrated by a very defective theory of prices, a theory which happened to make no allowance for the truth that it is quite possible to create a fixed ratio of value between two metals.

§ 2

Monopoly Prices

Let us begin by discussing the prices of goods, of which the whole supply is in the hands of a single person or corporation, owing to that person or corporation alone being authorised or able to supply them. Such prices are monopoly prices, and it is hardly necessary to say that they are largely under the control of those who produce the goods. But how far does this control extend, and is it likely that the monopolist will make use of the comparative liberty which he possesses in such a way as shall harmonise with the interests of society?

How far his control extends can be readily stated; at a certain price, which, however, may be very high in the case of some articles, all demand ceases. But it is safe to assume that in very many cases the monopolist will ask considerably less than this high price. More especially will this be the case when the article belongs to that class of which the sale is very readily affected by a change in the price.

He may ask what price he likes, but the amount of the article which he will be able to sell at that price is a thing beyond his control. He has to choose. If he wishes to sell a certain quantity he must not try to influence the price; if he wishes to influence the price, he must wait to see what quantity he will be able to sell. The monopolist can control the price, or he can control the sale, but he cannot control both at once.

Herein lies a safeguard against excessive dearness in the case of certain goods supplied under conditions in which competition is either altogether wanting or, at any rate, not very keen. That which competition—had there been any—would have brought about in such cases, the sellers themselves bring about, simply by adopting the course which they well know to be the one best calculated to further their own interests. They could ask much higher prices if they chose, but by doing so they would reduce their aggregate profits.

There are not many legal monopolies, especially in Holland, since the granting of patents for inventions was abolished in

that country. But there are natural monopolies, as, for example, when, in a given spot, room to carry on a particular industry exists for one person only; or for none but a very small number of *entrepreneurs*, who can easily, and do in fact generally, come to a mutual understanding. The reason why, in such cases, the prices are not always excessively high is, that high prices are by no means incompatible with low profits, and the *entrepreneurs* are aware of this.

There are two reasons, however, why the safeguard referred to above cannot be regarded as adequate in all cases. In the first place, we cannot be sure that the monopolist will always perceive wherein his true interests lie; for the force of habit has to be reckoned with and must not be underestimated. How long was it, for example, before the directors of English railway companies could bring themselves to see that the third-class passenger traffic was capable of yielding profit! Our view of the world of business would be quite wrong if we imagined that every one in it had a keen perception of what would bring him material advantage.

In the second place, it is not always easy for the monopolist to know whether a reduction in the price would be advantageous to him or not. Great praise has been given to SIR ROWLAND HILL, at whose recommendation cheap and uniform rates of postage were first introduced. But SIR ROWLAND HILL was greatly mistaken as regards the financial results of this measure. In his pamphlet of 1837, entitled "Post-office Reform: its Importance and Practicability," he expressed himself as confident that the number of letters sent through the post would in a very short time be increased five- or six-fold, so that the State would incur no loss by reducing the rates of postage. Not until 1854, however, or 14 years after the introduction of the measure, did the number of letters sent through the post attain those proportions; and even in 1873 the net receipts were still below those of 1839, the year preceding the introduction of the measure.¹ Lowering the price nearly always has a favourable effect upon the sale of an article. But what the monopolist wants to know is, how far this favourable effect will extend, and how soon it will manifest itself. And if his information on these

¹ See Dr. E. SAX, *Die Verkehrsmittel* (Vienna, 1878), vol. i. p. 307.

points is unsatisfactory or uncertain, we can quite understand his fixing his prices fairly high. In considering this matter we must not forget that increased sales in many cases entail increased expenses. A railway company, by reducing its freight and passenger rates, may increase its gross receipts considerably, and yet derive no profit from doing so, owing to the fact that expenses have increased in still greater proportion.

When, therefore, the State, acting in the interests of the public, grants privileges to private persons or corporations, it is not only just, but necessary, that it should reserve to itself the right to exercise constant vigilance, lest those privileges be used in a way that conflicts with the public interest. This applies more especially in the matter of railway concessions. A railway company has always more or less of a monopoly. The companies with which it has to compete are frequently so few in number that it has no difficulty in coming to terms, or even amalgamating with them. The eight principal English railway companies originated in no less than 226 smaller companies. It is most necessary, therefore, that the State should reserve to itself powers for preventing railway freights being regulated wholly in the interests of the shareholders, and with entire disregard of those of the public in general. In districts where there are no waterways to compete with, it may even be the duty of the State to refuse to allow private enterprise any share whatever in the working of railways.¹

The prices of goods, the production of which requires the exercise of special qualifications, must be regarded as monopoly prices. It has already been pointed out in a former chapter that such articles are not dearer than others because, and in so far as, the workpeople who produce them are paid higher wages, but that those workpeople receive higher wages because the articles which they produce are relatively dear; and the reason why they are relatively dear is, that they are relatively scarce. If all workpeople were both able and willing to perform every kind of work, artistically wrought objects would be cheaper than they are. The relation between the prices of such objects and those of other things would then be

¹ See R. A. J. SNETHLAGE's article, entitled "Indische Spoorwegpolitiek," in *De Economist* of 1891, pp. 241-286.

regulated approximately by the effort of production.¹ Now, the exchange value of artistically wrought objects is greater, sometimes considerably greater, than that of other things, because of the more or less limited quantities in which such objects are supplied. If one article, though requiring for its production only twice as much labour and capital as another, yet realises four or six times as much as the latter, it can only be because equilibrium between demand and supply in the former article cannot be established at any figure short of that higher price.

§ 3

Prices obtained by persons producing the same article under the same circumstances

It is necessary to discriminate in respect to goods for the production of which no special training or skill is needed, and which can be increased in quantity at pleasure. The circumstances under which the same article is produced may differ greatly as between its different producers. One, for instance, may have the advantage of fertile and well-situated land, while another has to work with land that is both poor and badly situated. But we are not speaking now of the goods to which this observation applies. We are assuming absolute equality as regards facilities for production, and that no one *entrepreneur* is more advantageously situated than another as regards either the acquisition, transport, or disposal of the goods. We now ask how, assuming this condition of things, the relative prices will be regulated.

They will tend to be so regulated that each article shall yield a normal rate of remuneration for the labour or capital employed in its production. We do not contend that things

¹ “Effort of production” is a literal translation of the Dutch *voortbrengings-macite*. The author of the present work has contributed a good deal towards making this word popular in Holland, where it was first used by Dr. MEES in 1866. It expresses all the labour—in the largest sense—and all the sacrifices involved in the work of production, and is to be distinguished from “cost of production,” which means the *price* paid for all this, which price, however, is nothing but the outcome of all that has been done (see Part I. chap. i. § 4).—A. A. W.

will invariably be in this condition, but when their condition is other than this, it must change, owing to the fact that prices are what they are. Whenever more than normal incomes are to be earned by producing a certain class of goods, many find it to their interest to supply those goods; and similarly, when the reverse is the case, many find it to their interest to cease producing the goods. Any deviation from the rule here referred to must be temporary, since such a deviation creates an inducement for doing that which will restore the operation of the rule.

We may mention one circumstance in particular that helps greatly to do this, namely, that in most cases the wages paid to labour, and in many cases the interest paid to capital, are stipulated in advance. This makes every deviation from the rule much more noticeable. Take two things, of which one has cost 200 and the other 100 days of labour on the part of 50 workmen. If one of these things were to fetch £1,000, and the other, instead of twice as much, or £2,000, were only to fetch £1,750, the deviation from the rule would not be very great. Nevertheless, it might result in the second *entrepreneur* getting nothing whatever for his pains; for, supposing the daily wage were 3s. 6d., the one employer's wages-bill would come to £875, and thus leave him a balance of £125, whereas that of the other employer would come to £1,750, and leave no profit-balance whatever. The wage system imparts greater force to the rule which we have indicated. If all enterprises were conducted on co-operative principles, the disparity in their results would be spread over a large number of persons. Under existing conditions this disparity affects the *entrepreneurs'* profit alone, or at any rate primarily, but for that very reason it affects it in a special degree.

But there are also causes at work here which produce and perpetuate disparity. The most important of these is the following. When expensive buildings or machinery are required for the production of a certain article, or for the performance of certain services, it is quite possible that, for many years in succession, they may not yield a normal rate of interest, and yet not be pulled down or altered for other purposes. This is because the owners are hopeful of better times, or else because greater loss would be entailed by allowing

the buildings or machinery to stand idle, or by altering them in order to use them for other purposes. The greater the amount of fixed capital required for the carrying on of a particular kind of enterprise, the longer it may be before enterprises of that kind yield any profit. Shipping freights, for example, frequently remain very low for a long period. The available ships continue to be employed so long as it is more profitable to employ them than to break them up, and this prevents the supply being reduced with sufficient rapidity to enable freights to get back to their normal level.

The law of equality of incomes for services of the same kind in the same place might be termed the law of the economic level. There can be no more doubt about the existence of this law than about the occurrence of the disturbances to which its operation is sometimes subject.

We must be careful, however, lest we set down as disturbances in the operation of the law, things which, if observed attentively, would be found not to constitute such disturbances. The law of which we are speaking is frequently expressed as follows: In the case of goods procurable in quantities sufficient to meet any demand that may arise, the prices vary according to the effort of production of those goods. This formula may be used in cases where there is no need for absolute accuracy of expression—for what BAGEHOT has called “words of precision.” But it cannot lay claim to correctness, and it would be a mistake to suppose that every case in which the prices of goods were not proportioned to the effort involved in their production was a case of deviation from the rule.

In the first place, there is great disparity in the extent to which capital and labour contribute respectively towards production. The result of this is, that the relation between the prices of things does not quite coincide with that between the amounts of labour bestowed on their production, but that it is also determined, as we have already pointed out, by the rates of wages and interest. A thing which it has taken six days of labour to produce will not be exactly three times as dear as a thing which it has taken two days of labour to produce, unless each of the six days has involved exactly the same employment of capital as each of the two days.

There is also disparity in rates of wages and interest as between different districts, and the causes which tend to equalise earnings within the confines of one and the same country—especially if it be small—are much less potent for equalising earnings as between different countries. Hence it is quite conceivable that two countries, which are very far apart, may exchange goods, the outcome of unequal exertions, so that the one exchanges on much more favourable terms than the other. Country A, for instance, supplies products which have cost it x in labour and y in employment of capital, and in exchange receives from country B articles which have cost the latter $1\frac{1}{2}x$ in labour and $1\frac{1}{2}y$ in employment of capital. Each workman and each capitalist will be remunerated according to the scale customary in his own country, but the scale of remuneration will not be the same for the two countries.

From the fact that the terms on which one country exchanges with others are less favourable to it than to them, it does not follow that exchange is to be regarded as disadvantageous to that country. There is always an advantage in exchanging, when by doing so we are able to procure more of a certain kind of goods than it would be possible for us to procure by producing them ourselves. It is even possible for the country which exchanges on the least favourable terms to derive most advantage from its international trade, so that by taking part in that trade it increases its income more than any of the other countries. For, the advantages accruing from exchange depend, not upon the greater or less quantity of labour bestowed on the things with which we are supplied, but upon the amount of labour which we save by acquiring those things in the way of purchase instead of by producing them ourselves.

In conclusion, we would point to a permanent impediment to the operation of the law stated above. Every country exports certain goods; therefore, those goods must be cheaper in that country than elsewhere. Every country imports certain goods; therefore, those goods must be dearer in that country than in their place of origin. This, in itself, is a sufficient reason why it should not be possible for a given sum of money to procure the same amount of enjoyment everywhere,

supposing such a sum to be spent everywhere in equal proportions for the purchase of the same kinds of goods. A given sum of money will procure a larger proportion of one kind of goods in one place and of another kind in another place. And this will be the case so long as any inducement exists for exchanging.

But we have dwelt sufficiently on this subject.¹ The reader has now been enabled to see by what general law the relative prices of goods of the kind spoken of in the present section are governed. The prices of such goods will have a tendency to be so regulated that the services rendered in the production of each article will be recompensed at a normal rate, that is to say, at a rate which shall be normal in the place where the services have been rendered. If we wish to be accurate, we must adhere to this way of stating the law and not admit any other.

§ 4

The Prices of Goods produced under Dissimilar Circumstances

What has been said in the foregoing section refers only to goods produced under circumstances which are the same for all producers of the same article. But we know that such similarity of circumstances does not, as a rule, exist among producers. In agriculture there is diversity in respect to the quality and situation of the land; in industry we have it in respect to the extent and nature of the facilities for production, the skill of the operatives, the ability of the managers. There is diversity also as regards the magnitude of sales, and this may be a point of much importance. It makes a great difference to a manufacturer whether he can keep his labour force and machinery constantly and fully employed, or whether he has to allow them to remain partially idle. Owing to all this diversity, it is in most cases impossible to determine a price at which it will be possible to supply an article at a

¹ All this has been explained at greater length by Dr. W. C. MEES, *Hoofdstukken*, pp. 164-171.

normal profit. The same price will more than suffice for one producer; for another it will just suffice; for a third it will be inadequate. We sometimes hear people inquire the cost of production of a particular article, that cost being in such cases understood to include wages and other necessary expenses which an *entrepreneur* must pay in order to produce the article. But how is that question to be answered where the effort involved in the production of the same article differs so much as between one producer and another? Who can tell us the cost of production of wheat, seeing that some lands yield 30, while others only yield 7 bushels to the acre? The price of silver in London is now about 30*d.* per ounce troy; yet we are assured that there are still silver mines in America which could be worked at a profit even if the price of silver were to fall to 14*d.* per ounce.

The question arises, What is it that, in the face of such great diversity, regulates the price of a given product in relation to that of other things?

This question has been answered by RICARDO in the following terms: "The exchangeable value of all commodities, whether they be manufactured, or the produce of mines, or the produce of land, is always regulated, not by the less quantity of labour that will suffice for their production under circumstances highly favourable, and exclusively enjoyed by those who have peculiar facilities of production, but by the greater quantity of labour necessarily bestowed on their production by those who have no such facilities; by those who continue to produce them under the most unfavourable circumstances; meaning, by the most unfavourable circumstances, the most unfavourable under which the quantity of produce required renders it necessary to carry on production."¹

Nothing that RICARDO ever wrote was more strongly combated than this. Fancy labour performed under the most unfavourable circumstances determining the price! If that were so, then a man living in a cold climate need only proceed to cultivate tropical fruit in hothouses, and forthwith that particular kind of fruit would become dear enough to repay the labour bestowed upon it! Or, again, if improved machinery were introduced in a given branch of industry, the

¹ *Works*, ed. M'Culloch, pp. 37, 38.

prices of the product would not fall until every single manufacturer in that industry had adopted the new machine!

These objections are not, however, valid. RICARDO assumes that a certain quantity of the article is *required*, and that those who are producing under favourable circumstances are unable to supply that quantity. It will be necessary, therefore, he says, to produce even under unfavourable circumstances; and people will not do this unless the price of the product be such as to repay the labour bestowed upon it. Suppose a country to have a population of 4,000,000 persons, each of whom consumes, on an average, 7 bushels of wheat per annum, so that the total yearly consumption of wheat amounts to 28,000,000 bushels. Suppose also that of this quantity 14,000,000 bushels could be supplied at a normal profit for the price of 4s. per bushel, 10,000,000 at the price of 5s., and 4,000,000 at the price of 7s. per bushel. If it be asked now what the actual price per bushel will be, the answer, according to RICARDO, is 7s.; for, at 5s. per bushel, only 24,000,000 bushels will be put on the market, and at 4s. only 14,000,000 bushels, whereas 28,000,000 bushels is the quantity required.

We shall presently see that this theory requires amplification in one important respect; nevertheless, it is sound. It is difficult to understand how any one who disputes it can account for rent, or for *entrepreneurs'* surplus, since both originate in the fact that the price of every product must ultimately yield a normal remuneration to those whose assistance in producing it is rendered under the most unfavourable circumstances, assuming their assistance to be indispensable. To those who can achieve their purpose with less labour than others, special gains accrue, which in the case of agriculturists are transformed into agricultural rent, and in the case of shopkeepers into higher shop rents. It is equally difficult to reconcile repudiation of RICARDO's theory with acceptance of the indisputable fact that crops are grown and stock is reared on poor and badly situated land, and that industrial enterprises are frequently carried on under circumstances the reverse of favourable. Were this labour to be remunerated according to what would be sufficient for those whose land was particularly fertile or well situated, or who

had special facilities for manufacturing, then the remuneration would frequently be so small that nobody could live on it.

But RICARDO's theory, though incontrovertible, is incomplete. Its author ignores the connection that exists in most cases between price and demand, and in doing so he fails to throw light upon one of the greatest of the complications arising from the inequalities in the amounts of labour required for the production of the same article. Whenever the demand is not independent of the price, but, on the contrary, expands with a fall and contracts with a rise in the price, RICARDO's proposition involves a circular argument. We are told that it is not by labour performed under the most unfavourable circumstances that the price of produce is regulated, but by that labour in so far as the "quantity of produce required" renders it necessary. If that quantity itself depends upon the price, then the proposition reduces itself to a statement that the price regulates the price.¹ RICARDO has not made good this deficiency. His proposition was intended more especially for the purpose of explaining the rent of land, and he was disposed to think that in respect to articles of first necessity there was nothing to show that any connection existed between price and demand. Every one, so he held, requires a certain quantity of such commodities, and will continue to provide himself with that quantity as long as he can; should the cost of doing so become greater, then he will save, not in the matter of these, but of some other commodities.² Rent being for the most part paid for land used for the purpose of producing food-stuffs, RICARDO considered any reference to a connection between price and demand as quite irrelevant in a theory of price whose sole object was to explain rent.

But in this he was wrong. There can be no doubt that in the matter of commodities of which mankind is most reluctant to curtail its consumption, the connection between price and demand is far less close than in the matter of other things; this would account for the fact that in cases of extensive crop failure, corn prices always rise to a very high figure. Corn

¹ As has been rightly observed by Dr. V. MATAJA in *Der Unternehmergewinn* (Vienna, 1884), p. 24.

² Cf. RICARDO's *Works* (ed. M'Culloch), pp. 114, 142, 145, and 207.

must become very dear indeed before any great curtailment of its consumption takes place; but if it does become very dear, then such curtailment does take place. Otherwise, how would it be possible, in cases of serious failure of the crops, to prevent the stock being completely exhausted? ¹

Cotton has, in our day, become an article of first necessity, almost ranking as such with corn, and we know how greatly the imports of cotton fell off during the American Civil War. In spite of this, however, the stock of cotton in England was never less than 377,000 bales at the end of any year during which the war lasted. This is fully explained by the great rise which took place in the price of cotton; but that rise would have had no effect if no connection existed between price and demand in the matter of articles of first necessity.

It is in the sense then of taking account of this connection that RICARDO's theory needs completion, and it is only by completing it in this way that we can get rid of the circular argument. In order to show how we can do so we will begin by pointing out the result of diversity in the conditions under which production is carried on.

The result of that diversity is that, as a rule, the supply of an article will be greater when the price is high than when it is low.

Of a given article, it will be possible to supply one quantity, A, at the price of 1s.; a second quantity, B, cannot be produced at a profit unless the price be at least 1s. 3d.; for a third quantity, C, the price must be at least 1s. 6d.; for a fourth, D, at least 1s. 9d.; and for a fifth, E, at least 2s. Now, it is evident that if the quantity A can be profitably supplied at the price of 1s., the same quantity can be supplied

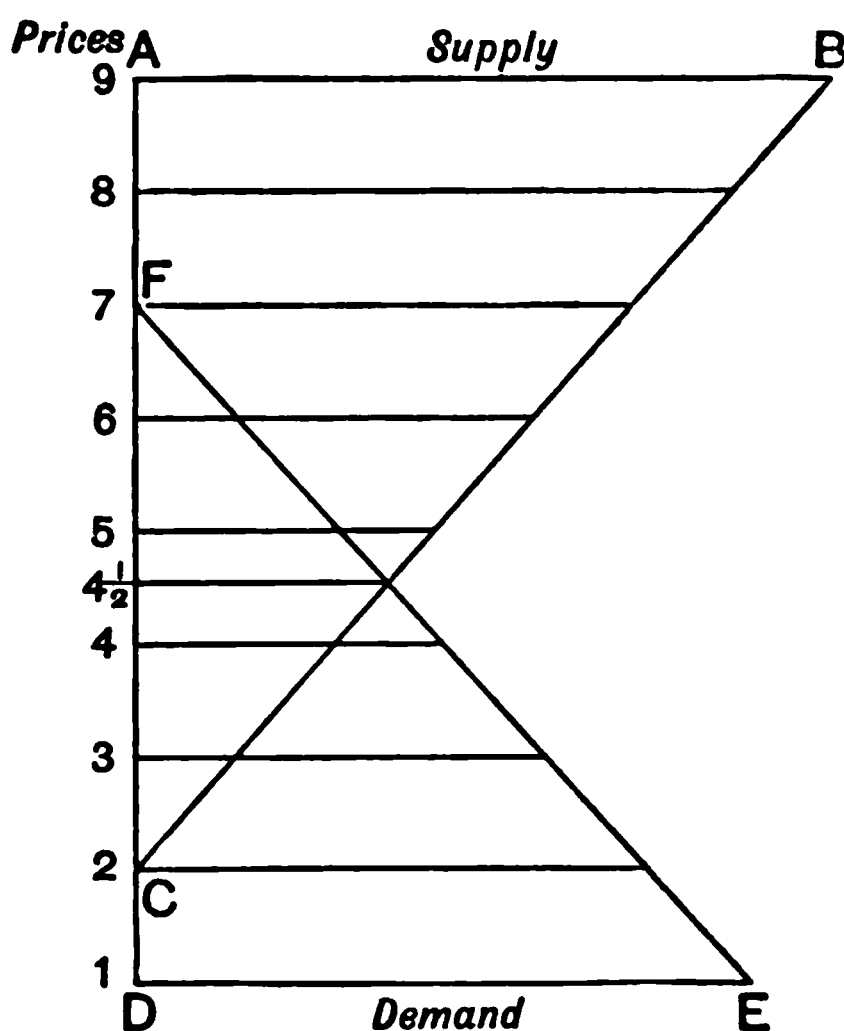
¹ MALTHUS rightly says, "It has been asserted by some people that high prices do not diminish consumption. If this were really true, we should see the price of a bushel of corn at a hundred pounds or more in every deficiency which could not be fully and completely remedied by importation. But the fact is that high prices do ultimately diminish consumption; but on account of the riches of the country, the unwillingness of the people to resort to substitutes, and the immense sums that are distributed by parishes, this object cannot be attained till the prices become excessive, and force even the middle classes of society, or at least those immediately above the poor, to save in the article of bread from the actual inability of purchasing it in the usual quantity."—*An Essay on the Principle of Population*, Book III. chap. v. p. 296 (seventh edition).

at the price of 1s. 3d. At the latter price, therefore, the supply will be, not A, but A + B, and with every lasting increase in the price the supply will increase. At the price of 2s. it will amount to A + B + C + D + E, whereas it only amounted—

		when the price was 1s. 9d., to A + B + C + D
„	„	1s. 6d., „ A + B + C
„	„	1s. 3d., „ A + B
„	„	1s. 0d., „ A

This might be represented graphically, and if it were, the shape of the diagram would be the exact converse of that which we employed in explaining the connection between price and demand.¹ Indeed, the relation existing between the latter is the exact converse of that existing between the price and the quantity that can be supplied. Less will be demanded when the price is high than when it is low, but in the former case more can be produced.

The price will make towards a point at which the quantity that can be supplied and the quantity that can be sold will as nearly as possible correspond. This will be the resting point of the price. If the price be above this point, it will have to



drop; if below, it will have to rise to it; if it be neither above nor below this point, then neither a rise nor a fall in the price is to be expected, unless changes take place in the schedule of prices either of the supply or of the demand.

The accompanying diagram will, perhaps, make this clear.

The supply schedule is represented by the triangle ABC; the demand schedule by the triangle DEF; at the price represented by the figure 9, a quantity represented by the line

AB could be supplied, but none of the article could be sold; at the price represented by the figure 1, there would be purchasers for a quantity represented by the line DE, but none of the article could be supplied. There is a point at which the quantity that could be sold and the quantity that could be supplied coincide with each other, and that point corresponds to the price of $4\frac{1}{2}$. We have called this point the resting point. Suppose the market price exceeds or falls short of this point, what happens? If it exceeds it, if it rises to 6, for example, a supply will be elicited, the amount of which can only be equalled by the amount of the demand at a price of about 3. If the market price falls short of the resting point, if it drops to 3, for example, a demand will be elicited which it will not be possible to supply at a price of less than about 6. But at the price of $4\frac{1}{2}$ it will be possible to produce a quantity which coincides exactly with the quantity that can be sold. This is the only point at which the price will not itself give rise to actions by which it will be either raised or depressed.

We have now to bear three things well in mind. The first is, that the state of things as depicted in our diagram is very simple. The lines BC and EF in the diagram are straight lines; but they need not necessarily be straight. It is by no means inevitable that the reduction which is brought about in the saleable quantity by a rise, and in the producible quantity by a fall, in the price, should be uniform; it may in either case take place in a series of gradations, and may terminate abruptly at a given point. In that case it may chance that absolute equilibrium between the two quantities will not be attained at any price, but also that it may be attained at different prices. In such cases the resting point of the price cannot be indicated. All that can then be stated is, that the price has a tendency to make for some point situated within certain limits, and if we wish to be able to give more precise information than this, we must seek guidance from other truths than those with which we have here become acquainted.

The second thing to be remembered is that, though it is a rule, it is not a hard and fast rule, that the supply cannot be so great at a low, as at a high price. Frequently produc-

tion on a large scale is carried on at a relatively smaller cost than production on a small scale. If, up to a given time, the demand for an article has been so small as to preclude its production on a large scale, an increase in the quantity of that article required will alter this condition of things, and the result of this change may be that the article will become obtainable at a lower price. We then have the remarkable phenomenon of an increase in the demand resulting in a reduction in the price.

The third thing which we have to bear in mind has already been alluded to in passing, and this is, that a change may occur not only in the circumstances under which production is carried on, but also in the demand. It is possible that the effects of these changes may counteract each other, and in that case the resting point of the price will remain undisturbed. But this will be accidental; as a rule, the result of changes in respect to the supply or the demand, or both, will be a shifting of the point at which equilibrium is possible between the quantity that can be supplied and the quantity that can be sold.

As far as supply is concerned, changes may occur in the conditions under which production is carried on. We are thinking now more especially of improvements in agriculture, or in industry, or in means of transport. A change may occur too in the relation between wages and interest, and we know what effect this will have. Excise or import duties too may be abolished or reduced, or they may be increased. All these things are productive of change in the quantity that can be supplied profitably at a given price. The supply schedule in such cases assumes a different form, and then, as has already been stated, the resting point of the price shifts its position. To what extent it will do so depends upon a variety of causes; it will depend largely, for instance, upon the extent to which the demand is susceptible to the influence of changes in the price. If, for example, an article be freed from a tax to which it has previously been subject, it is quite conceivable that the consequent reduction in the price of that article may elicit an increased demand, which cannot be fully satisfied at the reduced price. In that case the fall in the price will not correspond to the full amount of the tax that has been

abolished, but will be somewhat less than that amount. This is a fact that has frequently been observed; and it has also been observed that when a tax is imposed on an article, the price has not risen by the full amount of the duty; the sellers, finding themselves unable to dispose of the original quantity at such a price as would include the whole of the new tax, have had to content themselves with an increase corresponding to a part of it only. In the former case a certain increase has taken place in the production of the article; in the latter, a certain decrease. But in neither case has the resting point of the price shifted to an extent corresponding to the full amount of the tax.

The causes which bring about changes in the demand schedule, too, are various. Cold and heat; discoveries by which a new article is brought into use; changes in taste or fashion; increase or decrease of population; a rise or a fall in national wealth: these are the most important of the causes to whose operation it is due that an increase or a decrease takes place in the quantities of a given article that can be sold at different prices. All these causes operate together in perpetually shifting the point towards which prices are tending. It is, therefore, in a very relative sense only that that point can be called a resting point. It is a resting point at a given moment only. The same price which, to-day, would bring about equilibrium between the supply and the demand might, a year hence, disturb that equilibrium, if existing.

What we are taught by RICARDO's theory is both true and important, but it is incomplete, and we have now shown in what respects we regard it as such. His theory rightly contends that no price can be lasting, unless sufficiently high to provide a normal remuneration for the services of such labour and capital as have been employed under the least favourable circumstances in producing the required quantity of the article. This proposition is perfectly sound; but it needs to be brought into relation with another truth by which we are taught that, as a rule, the quantity required depends upon the price.

§ 5

**The Relative Prices of Goods capable of being used
for the same Purpose**

Before leaving this part of our subject, we have something to say concerning a point which merits our attention in connection with certain practical issues. What regulates the relative prices of goods which admit, either in the same degree or in different degrees, of being used for one and the same purpose? The question has to be taken in a very literal sense. There are many goods that serve for the same purpose approximately. Wheat and rye are both useful as food-stuffs; linen and cotton as material for clothing. Not every one, however, who requires wheat will be prepared to accept rye as a substitute, nor will every one who requires linen be prepared to accept cotton in its place. There are doubtless some whose choice will be determined by the relative prices of the two articles; but there are also many whom nothing short of absolute necessity will induce to have recourse to the inferior article; besides, the relative price which determines one man's choice will not always determine that of another. The goods, of which we are now about to speak, are those only, between which there is a fixed relation of utility; such, for instance, that the same results could be attained by using so much of the one or so much of the other. What we now propose to inquire is, in what relation the prices of such goods must stand to each other.

But by stating our question in this way we have really answered it. The relation between the prices must coincide exactly with that between the utilities of the goods. A given article costs two shillings per pound, and one pound of it will do the work of two pounds of another article. Under these circumstances nobody will pay more than one shilling for a pound of the latter. If, owing to a glut of the inferior article, its price were to drop to ninepence per pound, the price of the superior article would also drop, and the figure to which it would drop is eighteenpence. So long as the prices of the two articles stand to each other in the proportion of 2 to 1, there will be demand for both; but if that proportion changes, the whole of

the demand will become concentrated on the article which has become relatively the cheaper. The dearer article being then entirely abandoned, its price will fall.

When discussing monopoly prices, we noted that the monopolist has not the power to determine arbitrarily the price which he will get for his produce; his liberty in this respect is especially restricted when the article which he produces stands in a certain relation of utility towards other goods which can be increased in quantity at pleasure. This is equally true of services. Railways, which have to compete with waterways, must certainly so regulate their rates that some at least of the advantage resulting from more rapid transit may accrue to those who make use of the railways.

All this is so self-evident that probably nobody will contest it. Who would think of paying three shillings for the attainment of an object which he could attain equally well by paying two shillings? and who will pay more for transport services than they are worth to him? All this is confirmed by everyday experience. The same product can be manufactured from cane sugar and from beet sugar; as a result neither article ever falls in price without the other doing the same. A connection is traceable between the prices, even of things which cannot so readily be used as substitutes for each other as those just mentioned. Thus, when the price of American cotton goes up, so also does that of other kinds of cotton, though not always in the same proportion. When potatoes become dear, so also does rice.

But here a difficulty arises, and until we have disposed of it, we would do well not to draw practical conclusions from the foregoing. The difficulty is this. In discussing the causes which regulate the relative prices of things we have become acquainted with certain facts. We have seen how such prices are determined, firstly, in the case of goods produced under circumstances which are the same for all producers of the same article, and next in the case of goods, of which some producers have facilities not enjoyed by others of their class. We have to face the question whether our present and our former conclusions coincide, and if not, which of the two has to be amplified or amended.

Let us first suppose that two articles, of which the relative

utilities are as 2 to 1, are both obtainable in the same country with the same expenditure of labour and capital. According to the rule to which we have already referred, the prices of these two articles should be equal; but from what we have now seen, the one product will be worth twice as much as the other. What relation will now arise between the prices of the two products?

None whatever; since one only—the better—of the two will be supplied. This frequently happens. There are many goods which it would be quite possible to supply, and which could very well be used, but which are never produced, because they are esteemed less useful than other goods whose production entailed the same labour. With a certain amount of labour we can acquire a certain thing; with the same amount of labour we can acquire another thing which is twice as good. Who, then, would think of producing the former? Nobody could make any profit by doing so.

We are postulating here that the better of the two articles can be supplied in quantities large enough to meet any demand that may arise. Otherwise it would not belong to the class of goods which we are now discussing, but to the class of monopoly goods. It is quite conceivable that a demand which two articles differing in quality would be capable of meeting may not be fully satisfied by what is supplied of the superior article. In that case the price of the latter will continue to rise until it becomes possible to produce the inferior article with a normal profit. The result will be that the producers of the superior article will enjoy special profits. But the privilege of the monopolist does not always consist in the fact that he is able to supply what nobody else can supply; it frequently consists in the fact that he has certain facilities which enable him to produce a superior article at a cost and effort no greater than those involved in the production of an inferior article.

We will now take our illustration once more, only we will modify it. Two articles, of which the relative utilities are as 2 to 1, are both obtainable in the same country, but each article is produced under circumstances which differ widely as between its different producers. We will assume that the different quantities of each article that can be profitably

supplied at different prices are exactly the same for both articles. We shall now see that the relation between the prices of the two articles will once more be as 2 to 1, and that this will be in perfect accordance with the rule which we found to be in operation in connection with the prices of goods produced under dissimilar circumstances.

Let us recall the rule. There exists for such goods a resting point towards which the price tends. To find that point we must know, not only what quantities can be supplied, but also what quantities can be sold at different prices. The schedule of prices, not only of the supply, but also of the demand, has to be considered. When the supply schedule is the same for two articles, it does not follow that their prices will tend to the same point. They will do so only in the event of the demand schedule being also the same for the two articles. Where the supply schedule is the same, while the demand schedule differs as between the two articles, the prices, instead of tending towards the same point, will tend towards different points.

This is what happens in the present case. By hypothesis, a single quantity of article A supplies the same want as a double quantity of B: that is why all demand for A ceases when its price becomes more than twice that of B, and why all demand concentrates on A when its price drops to less than half of that of B. Any one can now see what must happen. People will begin by producing A—under the most favourable circumstances—and so long as the demand is not very extensive, the production of those people will probably suffice to meet it. Meanwhile it does not as yet pay to produce B, nor will it pay to do so until A has risen to double its former price. Then people will begin to produce B—again under the most favourable circumstances; and the first producers of A will be enjoying special advantages, while the first producers of B will be getting only a normal remuneration for their pains. Once more an extension takes place in the quantity required; more could be disposed of at, say, two shillings per pound for A and one shilling per pound for B than it would be possible to supply at these prices; thus a further rise in the price takes place. The first producers of B now begin, in their turn, to enjoy special profits, which, however, do not and never will

come up to those enjoyed by the first producers of A. For, however dear B may become, its price can never exceed one-half that of A. The prices of the two articles will always remain in the same relation to each other in spite of the fact that both articles are obtained under precisely similar circumstances. And this will not constitute an infringement of the rule governing the prices of goods, of which some producers enjoy greater facilities than others; on the contrary, it will be due to the operation of that rule.

The proposition according to which the relative prices of goods used for the same purpose are determined by the relative utilities of the goods with reference to that purpose may, we think, be now regarded as demonstrated. Conclusions of practical importance may be deduced from that proposition.

In the first place, it throws a great deal of light upon the effects of certain kinds of taxation.

Among the things which stand towards each other in a fixed relation of utility are those which serve as investments for money, such as landed property, sound stocks and shares, etc. Their relative utility is determined by the income which they yield; their value in exchange is therefore higher according as the income which they yield is higher. Other things being equal, a property which yields an income of £1,000 per annum must be worth twice as much as a property which yields only £500 per annum. What happens, then, when the State, by means of taxation, reduces the income derivable from a particular kind of property? In that case a change takes place in the relative utility, and consequently—according to our rule—in the relative price of that kind of property. We shall have more to say about this later on when we are dealing with public finance.

We also propose to reserve for a future chapter the discussion of the theory—based on the truth with which we have now become acquainted—that, by introducing the double standard on the basis of an uniform ratio, it would be possible to give stability to the relative values of gold and silver. The possibility of doing so has long been disputed, as involving a denial of the truth that the value of things depends upon demand and supply. We shall show later on that this is

a mistake, and that the theory of bimetallism is simply an application of this truth, if completely stated.

If the principal countries were to agree mutually that in each of them it should be legal to discharge a debt either in gold or silver, and that for this purpose 1 pound of the former should be regarded as equivalent, say, to $15\frac{1}{2}$ pounds of the latter metal, the result would be that, over a very wide area, gold and silver would acquire a fixed relative utility as instruments of exchange. The theory of bimetallism is simply a deduction from this observation.

§ 6

The Value of Money in different Countries

Prices may, as we have observed, be regarded from two points of view: that of their mutual relation, and that of their general level. If we regard them from the first of these two points of view, we consider the value in exchange of goods; if from the second, the value in exchange of money. In the former case we desire to know why, if A costs one shilling, B should cost three; in the latter we want to know why A and B cost just one shilling and three shillings respectively, and why prices in general are not twice or six times higher or lower than they actually are. In the first case we compare one description of goods with another; in the second we compare goods with money.

Henceforward we shall speak exclusively of the value of money; but in order not to penetrate further than is necessary into a region which cannot be fully explored at this stage, we shall begin with a certain hypothesis. The value of a coin in most cases somewhat exceeds that of the quantity of precious metal of which it is composed; a sovereign, for instance, will generally purchase more than could be got for 113 grains of gold. In a properly regulated coinage this difference between the nominal and the metallic value is always very small (except, of course, in the divisionary coinage), and it never amounts to more than the seigniorage, or, say, from $\frac{1}{8}$ to $\frac{1}{3}$ of 1 per cent. Our hypothesis is, that currencies are everywhere well regulated, that the value of

money nowhere greatly exceeds that of the metal of which it is composed.

Let us take first the question how the value in exchange of money is regulated in a country which produces its own bullion. The answer is simple. In such a country the value of money is regulated by the same causes as that of any other article. In such a country money is an ordinary product of national industry. Gold and silver are made to serve a variety of purposes, amongst others that of media of exchange. If the producers of those metals fail to secure a normal remuneration, they will cease producing them and use their capital for other purposes. This of itself will cause decreased demand, scarcity, increase in the value of money, consequently lower prices. For the lower prices are, the greater the amount of goods and services procurable for money.

If, however, money were to become redundant in such a country, a general rise in money prices would ensue. Such a rise took place on an extensive scale in Australia owing to the gold discoveries in 1851. When the first period of excitement was over, gold-mining became an ordinary branch of industry, the good and bad prospects of which could be calculated with tolerable accuracy. Experience had shown that the average daily find of gold per person was about 2 dwts. 6 grs., or about 10 shillings' worth of English money. Measured by the effort of production, therefore, the value of every article requiring a day's labour for its production had to rise to 10 shillings; that of an article requiring five days' labour, to 50 shillings; that of an article requiring ten days' labour, to £5, and so on. These high prices did not last in the case of all goods, it is true; for Australia, with her gold so easily obtained, soon found it advantageous to purchase from abroad a number of articles which she had previously produced at home. The high prices did last, however, in the case of every article which it was impossible to import, or to import with advantage; at any rate, they lasted so long as the effort involved in the production of gold did not become any greater.

It may not be superfluous here to warn the student against an error which is frequently committed. We sometimes hear it stated that a fall in the value of money *causes* a rise in prices.

This is not correct. A fall in the value of money and a rise in prices are not *two* occurrences, certainly not two occurrences standing to each other in the relation of cause and effect; they constitute a single occurrence described in two different ways. Unless there be a rise in prices, there is no fall in the value in exchange of money. Not until it has become impossible to procure, for a given sum of money, the same quantity of goods of every description as it has hitherto been possible to procure for that sum, can it be said that the value in exchange of money has decreased. But as soon as this impossibility has arisen, no matter how it may have been caused, a decline will have taken place in the purchasing power of money. For such a decline signifies an alteration in the ratio of exchange between goods and money to the detriment of the latter.

A change of this kind is inevitable whenever the production of bullion becomes very profitable. We must remember that in countries which produce their own bullion the production of money is an ordinary branch of industry. If this branch of industry yields special gains to those who engage in it under the least-favourable conditions, capital and labour will gravitate to it from other industries, and this gravitation will continue until those special gains have ceased to be procurable; in other words, until prices have risen to a point at which the incomes derivable from the production of money and those derivable from the production of goods become equal.

To the superficial observer it will appear as if what remains to be said in order to explain the value of money in countries which do not produce their own bullion, but export it from abroad, were obvious. He would probably argue that, just as colonial sugar costs less in Java than in Holland, or American cotton is cheaper in New Orleans than in Liverpool, so also must bullion be less valuable in the place where it is produced than in the place to which it is exported, and the difference in value can never exceed the freight. But the freight for gold and silver is exceedingly small; if the foregoing argument were correct, the value of money ought to be almost the same everywhere, and this, as every one knows, is not the case.

In order to clear up this point, we will first of all repeat and explain a remark made in an earlier part of this book.

A perfect comparison between different countries, as regards the purchasing power of money in respect to *goods*, is impossible. The cost price in money of any article produced on the spot depends upon two factors: on the number of days which it took to produce the article, and on the return in money which those who took part in its production have been able to obtain for each day of labour. There exists in every country a scale of "labour prices." The *labour price* (a technical expression)¹ is not the money wage alone, but the money wage *plus* the normal profit of the *entrepreneur* and the normal interest on capital. If this labour price for a certain kind of service be one shilling per day, and the number of days which it takes to produce a certain quantity of goods be 300, then the cost price in money of that quantity of goods will be £15.

It is obvious that the first of these two factors, which, for the sake of brevity, we call the effort of production, cannot

¹ It is only among Dutch economists that the term "labour price" used in this sense is a technical expression. In the second volume of his book the author explains the term as follows:—

"The labour price is the sum-total of all the money income gained by the application of a definite amount of labour and a definite amount of capital. Let us suppose that the labour of one man, supported by a capital of 1,000 florins, produces in 200 days commodities worth 250 florins; then, of course, one day's labour and one day's application of the said capital will be worth, upon an average, fl.1.25. This amount of fl.1.25 may be distributed in such a way that capital receives 25 cents and labour 1 florin, or in such a way that capital receives 50 cents and labour 0.75 florin; in the first case the interest will be at the rate of about 9, in the second of about 18 per cent. per annum. Yet in both cases the combined remuneration of the application of a capital amounting to 1,000 florins and of the labour of one man will be fl.1.25 per diem. Now this combined remuneration is called 'labour price.' The word should not be mistaken for labour wage; the labour wage and the remuneration of the *entrepreneur* are only a part of it, the remainder is interest on capital. As to rent and *entrepreneurs'* premium, these, as we know, are not realised in every case, but only when the production has taken place under favourable circumstances. In order to make our definition complete it should run as follows: the 'labour-price' is the sum-total of money income derived from the application of a definite quantity of labour and capital under *unprivileged* conditions.

"The term 'labour price' is a short expression for a *scale* of labour prices. We speak of the labour price in the same sense as we speak of the price of sugar or of cotton, though not all sugar and not all cotton brings the same price in the market. This should not be forgotten. A rise or a fall in the scale of labour prices must not necessarily be equal for all of them; the causes operating on the money prices of services in general may affect the relations of value existing between them."

It is admitted by Dutch authors that the expression "labour price" is not perfect, but they know of none better. They think, however, that it may be used when duly explained; in the same way as England is often used for Great Britain, Holland for the Netherlands, because England is the most important part of Great Britain, Holland the most important of the Netherlands.—A. A. W.

be the same in all places for all articles. Even with equal labour prices, therefore, great differences will be observable in the prices of goods, and commerce will never be able to remove those differences altogether, as some things cannot be transported, while for others the cost of transport would be too great. How should it be possible, then, to institute a perfect comparison between two countries as regards the purchasing power of money? In every such comparison individual experiences will play a prominent part, and individual experiences here depend upon individual wants. A country which one man regards as cheap might, with equally good reason, be regarded by another as dear.

The only way in which we can escape arbitrary conclusions here is to measure the local value of money solely by the labour price—that is to say, by the purchasing power of money, not in respect to goods, but in respect to services. In doing so we must remember that high labour prices are perfectly compatible with low prices for goods, seeing that in a country in which the former are high the effort of production may be smaller for many articles than elsewhere. All that we know for certain is, that where the labour price is high, a high price will have to be paid for all kinds of services, and that those things will be dearer there, of which the effort of production is the same as elsewhere.

The question as to what regulates the local value of money, then, resolves itself into the question, What regulates, in any country or any district, the labour price expressed in money? This question can be answered. The labour price—or, to speak more accurately, the scale of labour prices—in any country depends upon the quantity of standard metal obtainable in that country for the goods which it exports.

Suppose that wheat is the sole article of export, and that, owing to density of population, the production of that article has to be continued to a point at which it takes producers working under the least favourable conditions 300 days of labour to raise 100 bushels, while, after deducting freight—thus in the place where the grain has been grown—the price obtained is 3s. per bushel. Under these conditions the scale of labour prices in this particular country will be based on the fact that agricultural labour (including the wages of the

entrepreneur and the interest of the capitalist) is worth 1s. per day. An article which it required 100 days of equally valuable labour to produce would then cost £5. Were the labour devoted to that article twice as valuable as agricultural labour its cost price in money would be £10. The sum of money obtained for each day of labour spent on the production of the export article serves as a measure. And it makes no difference to the theory here set forth whether a nation exports one article only or a hundred; the bullion which it requires will always cost as much to that nation in services of all kinds as the production of the articles, in return for which the bullion is obtained. A scale of labour prices naturally results from this, and the cost price, in money, of all goods produced in the country varies according to this scale.

A high labour price, unless it be artificially brought about—by protective duties, for instance—always indicates a favourable economic situation. In order to show this we will suppose, in succession, the five following conditions as applying to a given country:—(1) scarcity of population; (2) progress in agriculture, combined with exportation of agricultural produce; (3) strong development of industry; (4) brisk demand abroad for the products of the country; and (5) declining freights for articles exported. All these conditions are favourable to the economic situation, but they are also favourable to the labour prices.

With a sparse population, there is no need to bring the less fertile lands under cultivation, or, generally, to work under very unfavourable conditions. The quantity of wheat which it would otherwise require 300 days of labour to produce will probably cost only half that amount of labour. This will not affect the selling price of the wheat abroad. But £15 divided by 300 gives 1s. as quotient, while with 150 as divisor the quotient is 2s.

The same illustration also serves to show the manner in which progress in agriculture operates. That, too, has the effect of reducing the divisor. It is to be observed, however, that increased supply may also cause the price to fall, in which case the exporting country forfeits some of its advantage, and foreign consumers come in for a share of it. But even in that case our theory is verified; it will scarcely be possible for the labour price to rise when things are in this condition.

A strong development of industry is only possible in a country rich in natural resources, and judicious and assiduous in using them. If the industrial products of such a country find a ready sale in the world market, they will procure a good return for the labour expended on them, and as a result the labour prices will be high.

Brisk demand for the products of a country has the same effect as a lessening of the effort of production. To use once again the language adopted in our illustration: lessening the effort of production reduces the divisor—the figure which indicates the number of days' labour; while brisk demand for the products increases the dividend—the figure which indicates the return in money. In either case the quotient, that is to say, the labour price, is increased.

Lastly, a word concerning reduction of freights on articles of export. Generally speaking, it is impossible to tell which country has to pay those freights—whether they come off the selling price and are therefore borne by the exporting country, or whether they increase the price, and are therefore borne by the importing country. A little nation exporting and purchasing articles of general use exercises no perceptible influence on prices either by its supply or its demand. With a great nation it is different, and when a reduction of freight has the effect of increasing its exports it cannot expect to benefit to the full extent of the reduction. Thus at a price of $10x$ per lb. such a nation will be able to find a market abroad for a certain quantity of goods; in order to find a market for a larger quantity it will have to be satisfied with a price of $8x$ per lb. If the reduction of freight amounts to $3x$ per lb., then the net gain will be x .

But in any case the reduction of freight is an advantage; and further, it invariably has the effect of raising the labour price, so that we see again what a favourable sign a high labour price is. We also observe a new advantage here as an effect of industrial prosperity. In proportion to value, freights are always lower for manufactured goods than for raw materials. The foregoing explains the low labour price of countries which chiefly export agricultural produce; it also explains another fact frequently observed, namely, that in places which were formerly cut off from intercourse with

the outside world the cost of living has increased when railways have enabled the people to engage in trade with other communities. It is true that the railways have made those things cheaper which used to be introduced from outside; but home products have become dearer owing to the increased labour price. One marvels at the stipends enjoyed in certain university towns in Germany in the last century; they were so small that it is difficult to understand how any one could live on them. But at that time those small sums of money represented a far greater purchasing power than now in relation to local products, and probably all except the wealthier citizens had, in the main, to restrict themselves to local products. The labour price in such places was exceptionally low, because, owing to the lack of transport facilities, the product of a day's labour could only fetch a small sum of money. Thus money possessed, locally, a very high value.

Let us now try to find a formula which shall embrace the whole of the foregoing. Whenever a nation is able to obtain much money for its products, it is also able to secure a liberal remuneration in the shape of everything that money can purchase. Suppose that India can obtain in England £5 for a hundredweight of tea, and that £5 is the price of a quantity, which we shall call x , of English produce. It is clear, then, that India can obtain in England x products for a hundredweight of tea, while if tea were worth £2, 10s. instead of £5 per hundredweight, India would have to pay 2 hundredweight for x . In that case the exchange ratio between India and England would be less favourable to the former. We have only to apply this illustration generally in order to find our formula. *The value of money in any country¹ is connected with the ratio of exchange between that country and the countries with which it carries on trade.* This formula must not be understood to mean that *every* improvement in the ratio of exchange causes the labour price to go up; but if the labour price goes up in the one country, while it remains unchanged elsewhere, this will prove that the ratio of exchange has become more favourable for that country. In so far as we may term countries with a high scale of labour prices "dear" countries,

¹ This word must be understood in an economic, not in a political, sense, so as to mean every part of a country constituting an economic entity.—A. A. W.

we thus arrive at the conclusion that it is a sign of national welfare to be a "dear" country—that is to say, one in which, relatively to other countries, money has little value.¹

We can use this occasion to supplement what has already been said concerning the wages of labour. The causes which determine *real* wages—the aggregate of the enjoyments which accrue to the labourer—have already been explained, but not the forms in which changes in the wages of labour must take place. Those changes must take place in one of two forms. The money wage may rise or fall, while the prices of goods required by the labourer remain the same; or the prices of those goods may rise or fall, while the money wage remains the same. To the labourer it is immaterial which of the two forms his change in wages may assume; in either case there is an alteration in the ratio of exchange between goods and labour. Nevertheless it is important to trace the economic laws which govern the forms in which changes in wages come about, and the results at which we have already arrived enable us to formulate these laws as follows:—

I. A change in wages will consist in a change in the money wage, when it originates in causes which exercise an influence upon the labour price. II. When it originates in causes which do not exercise an influence upon the labour price, it will take the form of a rise or fall in the prices of goods. III. But when wages change to the advantage or detriment of interest, both the money wage and the prices of certain goods will undergo a change.

I. Imagine a country which produces its own bullion and takes no part in international trade. Suppose that in such a country all things without distinction, *including bullion*, are now obtained in the same proportion with less effort than before, so that the employment of given quantities of capital and labour in any branch of industry now yields larger returns than formerly. The effect of this will be a rise in the money wage; but the prices of goods will remain unchanged. For

¹ It was RICARDO who first propounded this theory (*Principles*, chap. vii., "On Foreign Trade"). SENIOR has explained it more fully (*Three Lectures on the Cost of obtaining Money*, London, 1830), and it has been greatly improved by Dr. W. C. MEES (*Overzicht van eenige hoofdstukken der Staatshuishoudkunde*, Amsterdam, 1866, chap. iii.).

the increase in the returns of production being general, it cannot have any influence upon the values of goods relatively to each other; that is to say, in whatever proportion it cheapens A relatively to B, it will cheapen B relatively to A in the same proportion. When discussing the origin of value in exchange we saw that the values of things, relatively to each other, tend to coincide with the relative efforts involved in the production of those things. This proposition applies here. There are disturbing influences, it is true, but their potency will be no greater in the case which we are assuming than in any other.

The cause referred to will therefore make no change in the values of goods relatively to each other; but neither will it make any change in the money prices of the goods—that is assuming a normal condition of the currency,—in the values of goods relatively to bullion. If, under the given circumstances, a general fall in prices were to supervene, great advantages could be reaped by engaging in the production of bullion, and the production of other things would, in some measure, be abandoned for a while. Suppose that one can now obtain for *nine* ounces of gold the same quantity of goods as could formerly be obtained for *twelve* ounces of that metal, notwithstanding that gold had shared in the general lessening of the effort of production. This would move many *entrepreneurs* to withdraw their capital from agriculture and industry and transfer it to gold-mining. This migration of capital would continue until all goods had recovered their former value.

The following calculation will show how it is possible for money wages to rise in the case here assumed. A manufacturer, who employs 100 workmen, formerly obtained a product, which, after the money value of the raw material had been deducted, realised £4,000. Out of this sum he paid to each of his workmen £30, or in all, £3,000; the balance he retained as remuneration for his services as *entrepreneur*, and as interest on the capital with which he worked. At present he is able to obtain a larger product from the same quantity of raw material; the returns of his undertaking are increased by 25 per cent., let us say. He is now in a position to increase the wages of his workmen by 25 per cent., and himself to

enjoy 25 per cent. more than he did before. What makes an increase of the money wage possible, is the fact that while a larger *quantity* of products is obtainable with the same amount of effort, the *money prices* of those products have not fallen.

Let us now modify our hypothesis. Suppose the increased returns of production to be confined to goods strictly so called, and not to apply to money. What will now happen is the reverse of that just described: all money prices will fall, whereas wages will remain unchanged. *Entrepreneurs* will obtain more products, but owing to the lower prices which their products fetch, the *pecuniary* results of their undertakings will remain unchanged, so that they will not be able to increase their expenditure. Nevertheless, the workman will gain as much in this case as in the last, for he will get far more in the shape of enjoyments out of his wages.

Whether the advantage which accrues to labour from increased returns of production will take the one or the other of these forms, will depend on whether those increased returns do or do not extend to the production of money. If the cost price of money be reduced in the same proportion as that of all goods, the ratio of exchange between money and goods will remain exactly the same, and money wages will go up. But if the increase in the returns of production be confined to the goods, prices will fall and money wages will remain at their old level. It is also conceivable that a rise in money wages should be coincident with a fall in prices. This would occur if the lessening of the effort of production were not so great in the case of money as in the case of goods.

From our demonstration concerning the labour price it may be inferred that this conclusion has a wider bearing than would appear at first sight. Even in countries which acquire their bullion by commerce, bullion has a cost price—is acquired by production. The cost price in this case is represented by the *quantities of labour and capital that have to be applied in order to produce the goods in exchange for which the bullion is supplied from abroad*. What has already been said may be expressed in other words thus: By means of 1,000 days of labour, applied with the aid of a certain amount of capital, as much goods can be produced as are needed for the purpose of bringing into the country 1,000 pennyweights of pure gold

(worth about £212 at the Mint). The cost price of a penny-weight of gold, or 4s. 3*d.*, will therefore consist of a day's labour of a particular kind, together with the employment of a certain quantity of capital for the space of one day. If a lessening of the effort of production were now to take place in respect to goods of every kind—therefore, also, in respect to all articles of export—the cost price of money would also be reduced. We cannot, indeed, be sure that it would be reduced in the same proportion as the cost price of goods, for it is possible that owing to a larger number of articles being placed on the foreign market, less bullion may be received per article than before by the country so placing them; but that money will depreciate, that money prices will not fall proportionately to the reduction in the effort of producing goods, there can be no doubt. Consequently, the money wage will also be seen to rise under these circumstances. The income of the labourer will be larger, not because he will be able to procure more things for his money, or, at least, not for that reason alone, but either solely or more especially because he will receive more money for his labour.

What would happen in the event of a general lessening of the effort of production being really succeeded by a proportionate fall of all money prices in a country which imported its bullion? The imports of such a country would decrease, and its exports increase. As a result, the balance of payments would change, gold and silver would flow into the country; and this would continue until prices had risen to a point at which the normal relation between exports and imports had once more been restored.

II. We will now give an example of a change in wages due to causes having nothing to do with the labour price. Suppose that certain classes of goods, of which a country is in the habit of importing large quantities, become redundant—consequently cheaper—abroad. It is quite conceivable that this will reduce the labour price abroad; but it will not cause the labour price in the country of which we are speaking to rise. The only effect of the occurrence will be that the imported goods will cost less money; and if those goods are such as the labourer is in the habit of procuring, then he will get more enjoyment from his wages.

III. Probably all that is necessary in the way of explanation has now been said with reference to the foregoing ; but an increase of wages, when it is due to the growth of capital, and consequently takes place at the expense of interest, gives rise to certain complications. If the proportion in which capital and labour respectively contribute towards production were the same for all commodities, an increase of wages, having its origin in a fall in the rate of interest, could never manifest itself otherwise than by a rise in the money wage. But we know that this condition is not fulfilled. Some things require much capital and little labour, others little capital and much labour, for their production. The result of this difference is, that whenever labour becomes dear owing to capital being obtainable at a lower rate of interest, the production of the one article will yield special profits and will consequently increase, while that of the other will become less advantageous and will consequently diminish. The effect of this must manifest itself in a rise of the money prices of things which require relatively much labour, and a fall in the money prices of things which require relatively much capital to be employed in their production. But high prices reduce sales, and low prices increase them. Therefore, the demand for things which cost much labour will be seen to slacken somewhat, and that for things requiring the employment of much capital to be stimulated. International trade also will be affected by the change which has come about in the relations of prices ; there will be less demand and a greater supply abroad in the case of things which cost much labour, while in the case of things which cost much capital there will be a shorter supply and a greater demand. Owing to all this, and to a tendency towards the substitution of capital for labour, which will manifest itself, the money wage will not be able to remain at the level to which it rose at the beginning ; it will drop—and interest will rise—to a point situated between the old and the more recent level. How will labourers now enjoy better incomes ? In what form will the increase in their real wages ultimately manifest itself ?

In the first place, house rents will fall. If the rate of interest has dropped, say, from 5 per cent. to 4 per cent., then, in all places where net house rents comprised only a

normal rate of interest on the cost of building, those rents will drop to the extent of about 1 per cent.¹ on the building capital. In the next place, the workpeople will benefit by a fall in the money prices of many of their necessities, that is to say, those of which the money prices comprise much interest. Lastly, the rise in the money wage will enable them to purchase more of all those kinds of goods which have neither fallen nor risen in proportion to the money wage itself. These advantages will, it is true, be diminished by a rise in the prices of things that cost much labour; but as all goods do not belong to this class, the labourers can never lose as much as they gain in the circumstances which we have been supposing.

To conclude: if the proportions in which capital and labour respectively contribute towards production were for all articles the same, and if house rent consisted of wages and interest in the same proportions as the money prices of all goods, then the only form which an increase of wages due to an increase of capital could take, would be that of a higher money wage. In the present circumstances the money wage rises indeed, but not to the same extent as would otherwise be the case. The advantage of the workpeople lies also in the fact that they are able to procure lodging and certain kinds of goods on cheaper terms.

§ 7

The Value of Money at different Periods. The Method of "Index Numbers"

In the preceding section we discussed the value of money in different countries at any given time, and we experienced a difficulty arising from the fact that the same article may be dear in one country and cheap in another. Now we are about to discuss the value of money in one and the same country, but at different periods of time, and again we meet with a similar, indeed a much more serious, difficulty. A rise or fall of the general level of prices never represents a proportionate rise or fall of all prices; some articles will always rise or fall more than others; some will rise while others fall. Now,

¹ *Approximately*, for the cost of building will likewise have undergone a change.

what standard should we apply when comparing the prices of two different periods? How can we judge, not merely as to the *fact* of a change having or not having taken place in the value of money—in some cases there can be no doubt on this point,—but as to the *extent* of the change? How shall we find an arithmetical formula to express it?

Many hold the view that, in order to do so, we must take into consideration the relative importance of each article. If tea becomes 25 per cent. cheaper, while meat becomes 25 per cent. dearer, then the average price for the two articles—supposing them both to have originally cost the same—remains unchanged; but any one who used 20 lbs. of meat as against 1 lb. of tea would have to pay very much more than before. Therefore, it is contended, we must not assign the same degree of importance to all goods indiscriminately; we must find out how much of each article is usually consumed; its relative importance must be taken into consideration. Various ways of doing this have been tried, the most painstaking efforts being those of Mr. R. P. FALKNER,¹ an American statistician. He analysed the expenditure of 2,561 “normal families” in the United States. He then found a coefficient for each of the 223 kinds of goods figuring in his detailed statistics of prices, and thus endeavoured to make due allowance for the inequality in economic importance of different articles.

But the effect of changes in prices which do not extend equally to all articles is by no means the same for all classes of society, nor even for all persons of equal wealth. A classification like FALKNER’S can, at best, be applicable to a particular group of families having the same wants and living in the same way. The American statistician selected “normal families.” What are “normal families”? To what class of society do they belong? How many children are there in a “normal family”? The “relative importance” of each article must necessarily differ as between families differing in point of wealth and number of members. How should it be possible, then, to express that importance in a formula capable of being usefully employed in calculating changes in the value of money?

¹ *Wholesale Prices, Wages, and Transportation* (Washington, 1893), Part I. pp. 23 et seq.

Again, are not those who consider "relative importance" confusing two problems? A distinction must be maintained between an occurrence and the effects of an occurrence. Whenever more money, or less money, has to be paid for a given quantity of sugar, cotton, wheat, or other purchasable commodity, than was paid for the same quantity before, it shows that the value of money has changed. But how does such a change affect the welfare of each individual? This problem brings us into a new order of ideas, quite distinct from the first. FALKNER's method, supposing it to be correct, would acquaint us with the economic *effects* of changes in the value of money, whereas we are here concerned with the changes themselves.

Will it therefore be sufficient for our purpose to possess accurate and complete statistics of prices? It will, so long as we only desire information concerning the *fact* and the *direction* of a change in the value of money. Every one knows that in the second half of the sixteenth century a considerable decline took place in the purchasing power of money. To obtain a general idea of this decline, we have only to glance at the tables given by Dr. G. WIEBE in his work entitled: *Zur Geschichte der Preisrevolution des XVI. und XVII. Jahrhunderts*.¹ As a rule, however, we want something more than a mere general idea, though even that is frequently beyond our reach, owing to the manner in which prices differ from each other. We want to make an exact calculation in order to find out which of the two preponderates, the rise or the fall; and to what extent it does so. What method are we to apply in making this calculation? Here we encounter great difficulties, and it is very doubtful whether those who expect tables of prices to yield anything beyond a general idea of the direction of a change in the value of money, do not expect more than such tables are capable of yielding.

The most common method of measuring average movements of prices is that of "index-numbers," first applied in England. "Index-numbers" are figures of prices given in a form intended to show, not the prices themselves, but their fluctuations. For example, in the years 1867-77, the average price of American Midling Upland cotton in England

¹ Leipsic, 1895.

was 9*d.* per pound. If we wish to compare all previous or subsequent cotton prices in England with this average price for the period 1866-77, we represent the 9*d.* by the figure 100. The average price for the period 1878-87 was 6*d.*, which is then expressed by the figure 66·66. Every article included in the table is treated in the same way, with the result that a very good picture is obtained of the course of each price. WIEBE applied this method in the work just mentioned. The prices which he represents by the figure 100 are those of the second half (partly the last 33 years) of the fifteenth century; compared with these, for example, prices in Münster (Westphalia) in 1551-60 stood at 201 for rye, 173 for wheat, 189 for barley, 191 for oats, and 148 for beer. No simpler plan than this can be adopted by any one who wishes to show the changes in the prices of different articles.

Of the tables relating to more recent times, the best known are those of Dr. A. SOETBEER, brought up to the year 1891 by Herr HEINZ, chief of the Bureau of Trade Statistics of Hamburg;¹ those of Mr. SAUERBECK, the English statistician,² and those of Dr. F. KRAL,³ the Austrian writer. SOETBEER'S tables relate to 100 kinds of goods in addition to 14 "British export articles"; those of SAUERBECK to 45, and those of KRAL to over 265. Mention may also be made of the index-numbers published annually by *The Economist*, the well-known English weekly journal; but these refer to 22 articles only—amongst which cotton figures no less than four times! All these tables deal exclusively with prices of articles of commerce, none of them containing any information concerning prices of labour, land, or houses.

If these tables confined themselves to giving a separate index-number for each article, nothing would be less objectionable. But they usually give something more; they give *average* index-numbers. With SOETBEER and most of the others those averages are reckoned in the simplest way. The

¹ *Materialien zur Erläuterung und Beurtheilung der wirthschaftlichen Edelmetallverhältnisse und der Währungsfrage*, Berlin, 1886. Particulars as to the method of compilation are contained in *De Economist* of 1894, pp. 557-560.

² See article by this author in *The Economic Journal* of 1895, pp. 161-174.

³ *Geldwerth und Preisbewegung im Deutschen Reiche*, Jena, 1897.

sum of the index-numbers in each year is divided by the total number of articles. Those who have deemed it necessary to take the "relative importance" of the goods into consideration, have multiplied each index-number by a figure intended to represent this "importance," but they too have finished their calculation by adding and dividing. JEVONS, in a pamphlet written in 1863, entitled, *A Serious Fall in the Value of Gold ascertained*, also gave averages, but in calculating them he adopted a different method—the geometric in place of the arithmetic. It is by no means certain, however, that the system of averages furnishes results that can be depended upon for the purpose here in view; opinions differ on the subject. To say all that there is to be said upon this matter would take us into much detail, and this is scarcely necessary. Even though it could be shown that the system of average index-numbers was correct in principle, it would still be questionable whether, for the purpose of estimating changes in the purchasing power of money, it is possible to rely on such averages as have been supplied to us; for the best of the tables of prices on which any of these averages are based—and those of SOETBEER and SAUERBECK, but more especially the latter, may be regarded as the most accurate—are the very ones which are the least complete.

Except for the purpose of affording a very general idea of the course of prices—which they always do in the case of great changes in the purchasing power of money—statistics of prices should only be consulted for the purpose of ascertaining the movements of the prices of different *articles*. And it is precisely those movements which, when compared with each other, are generally of most interest to us. We have already alluded to WIEBE'S *Geschichte der Preisrevolution des XVI. und XVII. Jahrhunderts*, a work which comprises the whole of the information collected by ROGERS and D'AVENEL with reference to prices in those centuries, in addition to a large quantity of data extracted by the author himself from German records. From this work it appears that in the sixteenth century corn was certainly cheaper than at the present day, but not nearly so much cheaper as were animal foods. Thus, in the bishopric of Münster, between 1531 and 1540, rye was worth, in English money of the present day, about 2s. 1d., and wheat about

2s. 4½d. per bushel. On the other hand, a fowl could be purchased for 2d., one pound of butter for 2½d., 100 eggs for 11d., and a fat ox for £2:5s. Similar prices ruled in England, where between 1561 and 1570 a bushel of wheat cost 1s. 10d., a pound of beef about 1½d., a fowl about the same, a pound of butter about 3d., and 100 eggs, 2s. 10d. (A pound of sugar cost 9d.) In France, between 1531 and 1540, wheat cost about 1s. 10d. per bushel; butter, 2d. per pound. What do we gain by computing averages from such prices? Not to show the details is to withhold the very information which is most worthy of our attention, and nothing more should be attempted than to show the details.

Among these details, wages should occupy a prominent place. The prices of former days have no meaning for us, unless they are brought into relation with money wages. Concerning these WIEBE gives much information in the work already cited. He tells us, for instance, that the daily earnings of a journeyman carpenter in Münster, about the period 1531-40, were 8½d. in summer and 5½d. in winter, without board; that in Alsace, about 1526-50, they were 8½d. and 6½d. respectively; and that in England, in the period 1531-40, a carpenter was usually paid 9½d. per day; these figures agree fairly well with those given by Professor J. P. BLOK as the wages of carpenters in Leyden in 1520 and 1550.¹ Data concerning wages also serve to complete those which we possess concerning prices. They help us to determine whether the purchasing power of money has changed; but, like tables concerning prices, they give us no accurate information as to the extent of such changes.

It has always been an obstacle to comparison between the prices of the present and those of the past, that many articles which now figure as important items in almost everybody's expenditure were formerly not heard of, such as tea, coffee, tobacco, petroleum, daily papers, telegrams, stamps, post-cards, railway and tramway tickets, etc.; while, on the other hand,

¹ *Eene Hollandsche Stad onder de Bourgondisch-Oostenrijksche heerschappij* (The Hague, 1884), p. 399. The wages there stated are 4½ stuivers per day. The florin of 20 stuivers (now 9.45 grammes) contained 19.27 grammes of silver in 1520, and about 17½ grammes of silver in 1550.

certain things now only to be met with in museums and curiosity shops, such as arms and accoutrements of various kinds, were formerly in constant demand. But this obstacle loses its importance in proportion as we conquer the desire for an accurate measure of the value of money in former times, and content ourselves with what has here been recommended.

§ 8

Changes in Prices caused by Redundancy and Scarcity of Money

When a change takes place in the purchasing power of money, and when this change has been ascertained—in so far as it can be ascertained,—there still remains the question as to its *cause*. Is this to be sought in the goods or in the money? Statistics will never enable us to obtain an answer to this question. It is true that where a change in price extends over a large variety of goods and practically to all kinds of wages, the cause is supposed to be resident in the money; but we cannot be certain of the correctness of this supposition. It may be that technical improvements have taken place, and that they have taken place in such a number of trades simultaneously as to have caused a lessening of the effort of production for all the articles of which the prices have fallen. In the case of an *advance* in prices, there is greater probability of the cause being resident in the money. There would, however, be reason for doubting whether the almost universal advance in prices observable after the year 1550 could be rightly attributed to changes in respect to money, did we not know that, just about that time, imports of silver from America began to assume very considerable proportions, and that the annual production of silver in Europe rose to about 40 per cent. higher than it had been at the beginning of the sixteenth century.¹ It is seldom possible to trace the cause without much reflection. If inconvertible paper money were to be issued in Holland, and gold, after a certain time, commanded a premium of 50 per cent., any fall in prices which took place

¹ Cf. WIEBE, *op. cit.* pp. 268 and 270.

after the issue would be rightly attributable, of course, not to scarcity of money, but to causes resident in the article of which the price had fallen. And if, instead of happening in one small country, this were to have happened in a numerous group of large countries, there would be still greater probability of the article having fallen, and not of money having risen; for an excessive issue of paper money causes the standard metal to become redundant. But the problem is hardly ever so simple as in these two cases. For the past twenty years animated discussions have been taking place as to whether equilibrium between supply and demand in the matter of gold has been destroyed in our time; as to whether, considering growth of population, extension of the area over which the gold standard is applied, and increase in the use of articles of gold, that metal is being produced in sufficient quantities. Many maintain that it is; many, that it is not; and both sides adduce such arguments as any unbiassed judge is bound to respect.

Great as the difficulty of solving such problems is generally admitted to be, it cannot fail to appear still greater to us, since we know that no formula can be found for measuring changes in the purchasing power of money. The question to which we have referred calls not only for statistical, but also for economic investigation. In the first place, we have to ascertain *whether*, and if so, *how far*, the purchasing power of gold has increased; then, *if* it really has increased, we must find whether the cause of the increase resides in the gold itself, or in the goods. Those who believe in average index-numbers as affording sufficient information on the first point, will proceed to deal with the second as soon as they can obtain a table showing that those numbers have had a downward tendency during the past twenty years. Those, on the other hand, who have but little faith in average index-numbers, stand perplexed already at the first question. They see that many prices have fallen, and that many others have risen, but neither from the one nor from the other can they deduce anything as to the purchasing power of gold.

We will now endeavour to find the method which ought to be applied in order to discover whether the cause of a change in prices is situated in the goods or in the money.

It is not only in respect to general changes in prices that this question arises ; it may equally well arise in respect to any particular kind of goods. Wheat has become cheaper in our time ; that is to say, the ratio of exchange between wheat and gold has become less favourable for wheat, more favourable for gold ; is this to be explained by occurrences having reference to the wheat, or to the gold, or to both ? It seems to us that the least untrustworthy method for solving such problems is the method of residues. It has been applied, though not formulated, by W. A. WELLS, the American writer, in his work entitled, *Recent Economic Changes*.¹ In order to judge whether there is scarcity of gold, he traces the course of different prices and endeavours to explain each by causes independent of money. This he thinks he succeeds in doing in every case. He then arrives at what he considers the obvious conclusion, that there is no scarcity of gold. Had he not succeeded in obtaining a complete explanation in the case of every article, had he met with an unexplained residue in regard to any fallen price—that is to say, a reduction in price that could not be explained by occurrences related to the article—he would have been obliged to look for a cause resident in money.

We regard this method as being the least untrustworthy, and that is about the best that can be said of it. We will verify this contention by applying the method to an actual occurrence. Since 1872, the price of silver, as expressed in gold, has decreased by one-half.² We want to know whether by any chance the cause of this depreciation lies exclusively

¹ London, 1890.

² The gold-price of silver in London is expressed in pence per ounce troy, $\frac{2}{3}\frac{1}{4}$ fine. The following table shows the course of prices since 1851 :—

Price of Silver per ounce troy-weight.

	Lowest Quotation. d.	Highest Quotation. d.		Lowest Quotation. d.	Highest Quotation. d.
1851-55 .	60	62 $\frac{3}{4}$	1881-85 . .	47 $\frac{1}{2}$	52 $\frac{1}{2}$
1856-60 .	60 $\frac{1}{2}$	62 $\frac{3}{4}$	1886-90 . .	41 $\frac{1}{2}$	54 $\frac{1}{2}$
1861-65 .	60 $\frac{1}{2}$	62 $\frac{1}{2}$	1891 . .	43 $\frac{1}{2}$	48 $\frac{3}{4}$
1866-70 .	60	62 $\frac{1}{2}$	1892 . .	37 $\frac{3}{4}$	43 $\frac{3}{4}$
1871-75 .	55 $\frac{1}{2}$	61 $\frac{1}{2}$	1893 . .	30 $\frac{1}{2}$	38 $\frac{3}{4}$
1876-80 .	46 $\frac{3}{4}$	58 $\frac{1}{2}$	1894 . .	27	31 $\frac{3}{4}$

with the silver. In order to do so we first draw up a table showing the annual production of that metal. This, so far as can be ascertained, has been as follows:—

	Kilogrammes.		Kilogrammes.
1851-55 .	886,115	1881-85 .	2,778,071
1856-60 .	904,990	1886-90 .	3,472,163
1861-65 .	1,101,150	1891 .	4,479,649
1866-70 .	1,339,085	1892 .	4,730,647
1871-75 .	1,969,425	1893 .	5,031,799
1876-80 .	2,450,252	1894 .	4,637,531

Our next step is to ascertain whether silver is now being used more extensively than before as currency. The reverse appears to be the case; since 1872 silver has not been used as a standard metal in any highly civilised country. It is true that between 1878 and 1893 the United States still purchased and coined large quantities of silver; but since October 31st, 1893, they have ceased to do so, and in the same year the coinage of silver was stopped in British India.

We might now be disposed to regard the course of silver prices as being fully explained by the course of events; we find it to have been exactly what was to be expected. From an average of 1,339,000 kilogrammes per annum between 1866-70, we find the production of silver increasing to 2,338,000 kilogrammes in 1877, while the price, which ranged between 60*d.* and 62½*d.* per oz. in the former period, falls so as to range between 53½*d.* and 58½*d.* in 1877. The coinage of silver then begins in the United States, creating an annual demand for 670,000 kilogrammes, while the production gradually rises to 2,746,000 kilogrammes; the price now falls, but not very much, viz. from an average of 52⅞*d.* in 1878 to an average of 50½*d.* in 1884. Again, production takes an upward leap. In 1885 we find it has reached 2,993,000 kilogrammes; in 1888, 3,385,000 kilogrammes; in 1890, 4,180,000 kilogrammes; and in 1892, 4,700,000 kilogrammes; but, as we should expect, the fall in price becomes considerable; thus from an average of 50½*d.* in 1884 the price descends to 48½*d.* in 1885, 42⅞*d.* in 1888, and 39½*d.* in 1892; and in 1893 (with a production of about 5,000,000 kilogrammes), when the British Indian and United States mints were closed to silver, we find a positive collapse. In

that year the average price was $35\frac{9}{16}d.$, and in the following year $28\frac{1}{8}d.$ But the low price checks production, which, in 1894, we find to be less than in 1892; the price now recovers to the extent of a few pence. What more remains to be explained? it may be asked. If, in addition to the cause named, some other cause had been at work, some cause resident, not in the silver, but in the gold, a much greater fall would have been observable in silver. There is no unexplained residue whatever, so that scarcity of gold is out of the question.

Unless we are mistaken, the method of residues, as applied to an economic subject, shows itself here at its best. The conclusion seems convincing. But is it quite convincing? The reason why an explanation seems satisfactory may lie in its excellence, or in our ignorance or over-readiness to accept what appears to us to be a satisfactory explanation. Suppose we knew nothing about the changes which have taken place in the price of silver since 1872, would the figures which we are given above relative to production and demand enable us to draw up an accurate statement of the course of prices? A statement we could say for certain would be, that silver must have fallen especially since 1892; we could say nothing as to how far it had fallen. How can we be sure, then, that there is no unexplained residue? All that we can be sure of is that we are unable to observe it, and our inability may be due to our limited knowledge. The method is certainly useful, but it is not to be absolutely depended upon; so that its result should never be regarded as other than provisional, and requiring careful verification. In applying this method the utmost care must be exercised lest any unexplained residue, which might have been discovered by investigation, should escape us.

There is another reason why extreme care must be exercised in this matter. Occurrences which have a bearing upon money may exert an influence upon the demand for goods, and also upon the supply of goods. When this is the case, we shall always discover, as the direct cause of a movement of prices, some disturbance of equilibrium in respect to the article that has fallen in price; whereas the real cause will have been some occurrence related to money. We could give a great many instances of this, but one—a very telling one—

will suffice. When practically every one in Australia who could do so was rushing to the gold-fields, a falling-off in the production of the necessaries of life took place, and these became excessively dear. They had to be purchased from Europe with gold; in fact, at one time it paid to import wooden beams from Sweden. Thus in Australia itself there was diminished supply, and in Europe increased demand, and both were caused by the Australian gold industry.

The best way in which we can verify results obtained by the application of our method, is to ask ourselves whether they can be accepted in the light of what is known as to the operation of certain causes which exercise an influence upon prices. The further our knowledge extends in this direction, and the more accurate it is, the less danger will there be of our falling into error. In fact, one of the best means of verification is a sound theory of prices. The chief materials for the construction of such a theory are contained in the present section; a few only are wanting. What follows is intended to complete our theory, and at the same time to bring a stronger light to bear on certain matters with which we are already acquainted.

We have seen that one of the chief causes of popular error in questions of economics is the failure to recognise the simple truth, that effects which are in mutual conflict destroy each other. The population increases; this by itself would tend to make wheat dear as compared with labour; but instead of becoming dear it becomes cheap. This has been regarded as disproving the proposition that increase of population makes wheat dear. The same defective logic has given rise to erroneous views as to the relation between prices and increase of money. Money became redundant, and yet prices did not rise. This has been made a reason for denying that redundancy of money enhances prices. Or, rather, the truth of this theory has not been denied, but the redundancy has, although the fact of its existence was palpable.

As a matter of fact, the *noticeable* effect on prices produced by increase of money has sometimes been very slight. In the year 1831, the aggregate yearly production of gold—so far as known—only amounted to £2,750,000. About 1850, gold was discovered in California and Australia, and at once the

production went up to ten times what it had been during the period 1831-40 :—

Years.	Annual Production of Gold. £
1851-55	27,417,000
1856-61	27,833,000
1861-65	25,417,000
1866-70	26,833,000

This was followed by a reduction, it is true; the annual production of gold from 1871 to 1885 is estimated to have been as follows :—

Years.	Annual Production of Gold. £
1871-75	23,917,000
1875-80	23,750,000
1881-85	21,000,000

For the year 1883 we find as low a figure given as £19,917,000. But just about that time gold was discovered in South Africa, and in the years 1885 to 1894 the production of Australia, Tasmania, and New Zealand increased by 50 per cent.¹ Owing to this and other causes the world's gold production in 1894 reached the unprecedented figure of £37,500,000. We may assume that it now (1896) amounts to about half as much again as it did a quarter of a century ago.

But it still remains an undecided question whether, in the twenty years immediately following 1850, any noticeable effect on prices can be traced to this enormous increase in the production of gold. In 1872 and 1873, owing to special causes, a strong rise in prices took place, but it was of a very temporary character and was succeeded by a great fall. As regards the increase—practically the doubling—of the output of gold after 1883, it is quite certain that no effect on prices has been felt from it to this day. We now want to show that such things as these must not awaken doubt in our minds as to the correctness of the theory which declares that money is an ordinary article of merchandise, the value of which is determined by the same causes as those which determine the value of all commodities.

¹ According to the Report of the British Mint for 1894, p. 146.

It must be borne in mind that the world's stock of gold coin is very large; and just as the addition of a quantity of water has little effect on the level of a pond if the pond is a large one, so also must the effect of gold production on prices be slighter, the larger the amount of gold money in existence. And in this case the pond is much larger than it appears. Presently, when we are passing the various monetary systems in review, we shall come across a kind of silver money which fulfils a peculiar *rôle*, corresponding in some measure to that of divisionary money. The Dutch rix-dollar is of this kind; its value is not determined by the quantity of silver which it contains, and by the price of that metal in the world market; the rix-dollar represents gold, performs the function of gold. This silver money performing the function of gold must be included. For instance, according to the most recent figures available the stocks of bullion and specie in Holland are as follows:—

	£
Gold	3,965,000
Silver and divisionary money	11,801,700
	<hr/>
Total	15,766,000
	<hr/>

If gold to the value of £1,000,000 were to be imported, coined, and put into circulation, it would be necessary, in estimating the importance attaching to the fact, to consider that sum in relation, not to the £3,965,000, but to the £15,766,000. A Dutch authority¹ has estimated the amount of gold in Europe, the United States, and Australia at £696,000,000, but he estimates the quantity of silver performing the function of gold at no less than £420,000,000; which shows how important it is not to omit this class of money from our calculations. Since the importance attaching to the gold production of any time is to a great extent determined by the magnitude of the stock to which the new gold is added, it is necessary that we should be correctly informed as to that magnitude.

There are still other factors which explain the course of prices in this second half of the nineteenth century. The supply of gold increased considerably, but so also did the demand.

¹ G. M. BOSSEVAIN, *Le problème monétaire et sa solution* (Paris, 1894), p. 78.

The consumption of gold for industrial purposes must have been increased very much by the increased wealth of the population. SOETBEER estimated it in 1886 at about £12,500,000 per annum,¹ a figure which we may very well accept when we remember that, according to official returns, the annual consumption of gold for industrial purposes in Holland between 1872 and 1890 was about 11½*l.* per head of the population.² Furthermore, the area over which the gold standard is applied has been growing steadily since the commencement of the imports of gold. Lastly, and this is perhaps the most important of all, the effort of production has been reduced in the case of a great many different kinds of goods during the second half of the nineteenth century. Existing inventions have been more extensively applied, or have been improved; means have been found for effecting great economy in the consumption of coal; above all, railways have been built, at first almost exclusively in Europe, but afterwards in other continents as well. Money wages have risen in countries having the gold standard, from which it may be concluded that the labour price also went up. But for a number of articles the diminution in the effort of production was greater than this rise. When we take all these things into consideration, we find the increasing production of gold to have been one of the many causes which have influenced prices. Had it operated singly it would have raised them, but it did not operate by itself.

We will give a second example of an increase in money having no appreciable effect on prices. In British India, where the silver standard in its most rigid form was in operation up till 1893, no rise in prices and wages at all proportionate to the fall in the gold price of silver in London has been caused by the extensive importation of silver in recent years. This is another phenomenon which is not always properly understood. Many have regarded it as affording clear proof of scarcity of gold; almost the whole of the depreciation of silver prior to the year 1893 is supposed to be traceable to causes related to gold. But this can scarcely be reconciled

¹ *Materialien*, p. 38.

² *Bijdragen tot de Statistiek van Nederland* (uitgegeven door de Centrale Commissie voor de Statistiek), vol. ii. p. 38.

with the facts cited in the previous section with reference to silver production and the demand for silver; then how is the phenomenon to be explained? It is another instance of causes operating in contrary directions. The chief articles of export from British India (besides opium) are cotton, jute, rice, wheat, seeds, tea, and hides. All these articles have decreased in value in the world market, some of them very considerably. According to SAUERBECK'S tables, their course has been as follows:—

	1867-77.	1878-87.	1885-94.	1893.	1894.
Fair Surat cotton in pence per pound	6 $\frac{3}{4}$	4 $\frac{1}{4}$	3 $\frac{9}{16}$	3 $\frac{9}{16}$	2 $\frac{5}{8}$
Jute in £ per ton	19	15	13	13	12 $\frac{1}{2}$
Rice in shillings per cwt.	10	8	6 $\frac{7}{8}$	6 $\frac{1}{8}$	5 $\frac{5}{8}$
Wheat " " quarter	54 $\frac{1}{2}$	40	30 $\frac{1}{2}$	26 $\frac{1}{3}$	22 $\frac{11}{12}$
Linseed " " " "	60	46	41	42	38
Tea (common Congo) in pence per pound	11 $\frac{1}{4}$	6 $\frac{3}{4}$	5	5 $\frac{3}{8}$	4 $\frac{1}{4}$
Dry hides in pence per pound	9	5 $\frac{5}{8}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$

It is upon cotton more especially that we must fix our attention if we want to understand what took place in British India. In the period 1857-61, the annual exports of cotton from that peninsula amounted to £4,561,000 out of a total export trade of £28,717,000. Then came the American Civil War, causing cotton prices to go up very considerably. The average price of Indian cotton (fair Surat) in Liverpool was 6 $\frac{5}{8}$ d. per pound in 1861, but in 1862 it was 18 $\frac{7}{8}$ d.; in 1863, 19 $\frac{1}{4}$ d.; in 1864, 21 $\frac{1}{2}$ d.; and in 1865 it still stood at 14 $\frac{1}{2}$ d. The value of the cotton exports from British India rose to 10, 18, 35, and 37 millions of pounds sterling in those years respectively! Let us recall what was said above with reference to the labour price: how, in each country, it maintains a relation to the ratio of exchange between that and other countries. What happened in India, therefore, was that her ratio of exchange underwent a marked improvement, that a cause originated, the tendency and the effect of which was to raise the labour price in India considerably. But all this was temporary. In 1868 the average price of cotton fell to 8 $\frac{3}{4}$ d.,

in 1876 to 5*d.*, and subsequently it fell still further, while the prices of other important articles of export were also reduced. Had this fall operated alone, a general fall in prices and wages in British India would have been observed; but it did not operate alone, a fall in the price of silver in the world market taking place at the same time. Thus two tendencies were operating in contrary directions. The result was that Indian prices and wages expressed in silver underwent scarcely any change. The tendency of the depreciation of the articles of export was to depress prices and wages; that of the depreciation of silver was to make them rise, and the one force proved practically as strong as the other. It was as if bodies of about equal weight had been placed, one on each side of a pair of scales; equilibrium was practically preserved.

An important question bearing upon the subject in hand is that of the manner in which the purchasing power of money is affected by the use of bank and Government notes. Here it will be only our task to dispel an error—one which is very common even among those who have made a study of such questions. It is agreed that only certain issues of paper money affect the demand for gold and silver; but there are many who would make convertibility the test, and who hold that the demand for gold and silver will or will not be affected by a paper issue, according as there may or may not be any difficulty in converting the paper into coin. But convertibility has nothing whatever to do with it; it all depends on whether the issue is covered by a metallic reserve or not. Only uncovered notes supply the place of gold and silver, but all uncovered notes do so, whether they be convertible or not.

We know that there are three ways by which a bank puts notes into circulation: it issues them in exchange for gold and silver, or in credit operations, or in purchasing stocks and bonds. These, at any rate, are the three principal ways. A bank also issues notes when it causes office premises to be built, or when it pays salaries; but the amount of notes put into circulation in these ways is comparatively insignificant. The balance-sheet of a bank which is only a bank of issue is the simplest thing imaginable, except where, as in England, the law has enacted intricate rules, under which the bank is

prevented from using its own discretion in the matter. Up till 1864 it was not the practice of the Netherlands Bank to publish in its balance-sheet any figures other than those showing the amount of its stock of bullion and specie and its note circulation.¹ The amount paid out in loans and discounts did not appear, but the figure could be easily calculated; for it is only by using its own capital and by issuing notes that a bank of issue can engage in credit operations. In order, therefore, to calculate for how much the bank had drawn on sources other than its own capital for the purpose of granting loans and discounts, one had only to find by a sum in subtraction for what amount the bank had issued notes in excess of its metallic reserve. It was only the deposits that complicated matters a little. The Netherlands Bank is not a bank of issue alone, it is also a bank of deposit; and consequently a part of its notes return to it, in this way, that certain persons or institutions are credited in its books to the amount of those notes. Deposits should be regarded as bank notes. They are sometimes not inaptly termed "notes belonging to the public and held by the bank at the disposal of their owners."

The main object of this demonstration is to prove that the two following totals are identical: (*a*) uncovered notes and deposits, and (*b*) advances, discounts, and stocks or bonds purchased by bank out of sources other than its own share or reserve capital. Later, when discussing foreign exchanges, we shall take this for granted, and use it as a basis for various considerations concerning currency and credit.

To return to the question of the influence of the bank note upon the demand for metallic money. So long as a bank issues notes to those only who bring it bullion or specie, its proceeding is similar to that of a warehousing firm when giving receipts for goods entrusted to its care. But when it grants loans, discounts bills and promissory notes, or purchases stock—in excess of its share and reserve capital—it increases the quantity of currency. Now, either the public does, or it does not, require a larger supply of currency. If it does, a demand, which would otherwise have been met with gold and silver, will have been met with uncovered paper. If it does

¹ Besides the deposits, of which we shall have more to say presently.

not, a quantity of gold corresponding to the uncovered notes issued by the bank will leave the country. In either case the effect of the issue is unmistakable; it is precisely when its convertibility is perfect that the uncovered bank note does its work most quickly and completely.

To illustrate this we subjoin a typical balance-sheet of a bank of issue pure and simple:—

<i>Liabilities.</i>		<i>Assets.</i>	
Share and reserve capital		Moneys outstanding	
	£2,000,000	on loan and dis-	
Notes in circulation	£20,000,000	count . . .	£11,000,000
		Stocks and bonds .	1,000,000
		Gold reserve . . .	10,000,000
	<hr/>		<hr/>
	£22,000,000		£22,000,000
	<hr/>		<hr/>

If the bank were to increase the amount of its loans and discounts by £2,000,000, thus issuing more notes at a time when trade was not such as to call for any increase in the quantity of currency, a redundancy of money to the extent of £2,000,000 would result, and this redundancy would have to be got rid of in some way. The simplest way of getting rid of it would be for the public to offer notes to that amount in exchange for gold coin or bullion, and to export the metal so obtained. When discussing foreign exchanges we shall show that an incentive would arise for the adoption of this course. The note circulation of the bank, after having been temporarily increased to £22,000,000, would then be reduced to its original figure again; nevertheless, an important change would appear in the balance-sheet of the bank: the uncovered circulation previously amounted to £20,000,000, less £10,000,000, but now it amounts to £20,000,000, less £8,000,000. Uncovered paper has taken the place of gold, and it is precisely by reason of its convertibility that it has done this so speedily.

A redundancy of money would have resulted just the same if the notes had been inconvertible at the time when the bank increased its credits. The public would then have made an effort to collect gold out of the money in circulation. If it succeeded in this without any difficulty, the gold would be exported as before, but we should also have another proof that

the effect of the uncovered bank note was in no way increased by its inconvertibility; and the proof would be more convincing still if the public failed in its effort to collect the gold from amongst the money in circulation. The disappearance of the redundancy would then be brought about by the *depreciation* of the bank paper, so that while, nominally, the value of the bank's note circulation would still remain at £22,000,000, its real value, its value measured by gold, would be less. From this it will be seen that the doctrine which we are refuting is even further from the truth than it seems at first sight. According to that doctrine, it is only inconvertible paper that affects the demand for metallic money; the truth, however, is that such paper, being liable to depreciation, sometimes has less effect than convertible paper on that demand.

What has just been said with reference to deposits will suffice to show that they differ from bank notes only in form. Commercial usages are not everywhere the same. In some countries people prefer to keep their cash in their own houses or offices; in others, they prefer to entrust it to the care of a bank. This difference is not unimportant, but it possesses no significance in relation to economy in the use of metallic money, which economy can be effected in a variety of ways. There are other substitutes for money besides bank and Government notes.

Instead of stopping to discuss this, we think it preferable to show the practical importance of one of the conclusions which we have now reached. Redundancy of money (using that word in the widest sense) causes money to depreciate; this proposition may be reversed, by saying that depreciation of money proves money to be redundant. When gold fetches a premium as against paper money in a country where gold is the standard metal, it *proves* that there are more notes in circulation than are required. When the divisionary money or the silver token coinage of such a country is not worth as much as it should be worth, in relation to gold, it *proves* that an excessive quantity of one or other of the two former kinds of money has got into circulation. Two remedies are possible, according to the circumstances: one is, to restrict the circulation of the money that has become redundant; the second is, to get rid of some other kind of money, so as to

make room for the former. But one of these two remedies must be applied if the evil is to be overcome.

These simple truths are repeatedly denied, or else they are forgotten. Yet it can be shown that no banking or monetary policy based upon other principles has ever resulted in anything but confusion. They constitute the essence of what is called the *Quantitative Theory*; a theory which applies to the phenomena of money the general idea underlying the doctrine of value, and which therefore asserts that, given the same demand—which, itself, may change however,—the supply of money determines what the value of money shall be.

The arguments adduced against this theory are in great measure answered by what has been said above. On the whole their importance is not very great. People have compiled tables intended to show that in countries with inconvertible paper money, the depreciation has not always proceeded *pari passu* with the quantity of such paper in circulation; but the compilers of these tables have forgotten to inquire as to what the demand for money happened to be at the different periods of time, and as to whether the notes were in equally good repute the whole time. Or else people have tried to prove that not only the quantity of the money which passes from hand to hand, but also the celerity with which it does so, should be considered. But the very fact that we speak of *demand* implies that we do take that celerity into account. A sluggish circulation causes increased demand for money; it is only one of the many factors which determine that demand. Moreover, the expression, “circulation of money,” though quite permissible in most cases, does not indicate the functions of money sufficiently accurately to permit of its being used in all circumstances. Money does not circulate; it is received, retained, or disbursed. When the circulation of money is slow, it denotes that those who receive money keep it in their safes too long, because they cannot make up their minds how to lay it out, or think it unsafe to part with it. Under a well-regulated banking system—in which we include savings banks—all reserve funds, all moneys, of which the destination was still uncertain, would be entrusted to banks, which would invest them as quickly as possible. A sluggish circulation is therefore a faulty expression for an ill-regulated system of

banking, or for a system which, though well regulated, is not made use of sufficiently, owing to ignorance, habit, or groundless distrust.

This brings us to the end of what we have to say concerning value in exchange, a subject which we have now examined in all its aspects—rent of land, rent of houses, interest on capital, profits of *entrepreneurs*, wages, and prices. The question of prices forms, as it were, a link between the subject which we have been discussing and that which we are about to take up, namely, the theory of money. To reflect upon the important problems which arise in connection with that theory is of no avail until we have learnt to regard money as an ordinary article of merchandise, subject, like all such articles, to alternations of redundancy and scarcity, and, as regards the fluctuations in its value, subject to the laws of supply and demand.

We will begin by sketching the history of the various monetary systems, adding to our sketch considerations of a theoretical nature.



PART II

MONEY



CHAPTER I

THE PRINCIPAL MONETARY SYSTEMS

§ 1

Great Britain and British India

THOSE who wish to learn the origin of the monetary systems of Western Europe should begin by examining that in operation in Great Britain at the present day. That system has undergone many changes, some of a radical nature; but in one respect it remains unchanged: English people still reckon in pounds of 20 shillings and shillings of 12 pence, as they did in the days of William the Conqueror. The same system was formerly in vogue in France and in the northern part of the Netherlands. The French *livre* was divided into 20 *sols*, the *sol* into 12 *deniers*; the Flemish pound into 20 *schellingen* of 12 *grooten*, the Dutch pound into 20 *schellingen* of 12 *penningen*. It was not until the fifteenth century that another kind of pound came into use in Holland: a pound consisting of 20 *stuivers* of 16 *penningen* each. But this was the result of the amalgamation of two sorts of money of account circulating side by side. We shall explain this hereafter.

In the course of time, however, a remarkable change came about in the meaning of the word "pound" as applied to money. It was originally a unit of weight. During the reigns of the earlier Norman kings a pound sterling actually meant a pound weight of silver pennies. The pound weight then in use was the "tower pound." It weighed 5,400 grains troy, and the pennies were 0.925 fine.¹ A

¹ See RUDING, *Annals of the Coinage of Great Britain*.

pound sterling therefore represented 4,995 grains of silver, and a shilling, the 20th part of this, or $249\frac{3}{4}$ grains.

By degrees, however, lighter coins began to be struck. Edward the First, in 1300, coined money which made a shilling equal to 244 grains of pure silver; Edward the Third, in 1351, made it equal to 200 grains, Henry the Fourth, in 1412, and Edward the Fourth, in 1464, to 166 and 133 grains respectively. In the reigns of Henry the Eighth and Edward the Sixth the debasement of the coinage was very marked. In 1543 the silver value of the shilling fell to 111 grains, but owing to reductions both in weight and fineness it gradually dwindled down to 24 grains in 1552. As 20 shillings were always called a pound sterling, the quantity of silver which the pound sterling originally represented was now reduced to 480 grains, or less than one-tenth of its original amount.

Under Queen Elizabeth a new regulation of the coinage was made. The shilling was now to have a weight of $\frac{1}{8}$ of a pound troy, or 5.760 grains, which gave to the pound sterling a silver value (at a fineness of 0.925) of 1,718 grains of silver.

From the foregoing it will be seen that in the Middle Ages, and even much later, the standard metal in England was silver; in fact, silver was the standard metal everywhere in those times. Considering the high value which the precious metals then possessed, it was natural that there should be little demand for gold. Nevertheless, from as far back as the year 1345, gold coins have been struck in England, and foreign gold has also been current there. The well-known florins (named after the city of Florence) contained 58 grains of gold,¹ and circulated with the nobles, rose-nobles, and sovereigns of the English Mint. Still gold occupied a subordinate position as compared with silver. The first change in this condition of things took place in the eighteenth century, owing to the remarkable combination of circumstances which we are about to describe.

In the reign of William the Third, the silver money of

¹ According to G. CAPPONI, *Storia di Firenze* (Part I. p. 38), 8 *florini d'oro* were coined from one ounce of "fine gold." The fineness in this case was, however, $\frac{4}{5}$.

England was in a very bad condition. Badly coined to begin with, it had suffered so much from abrasion and clipping that in many cases it was reduced to half its legal weight. New coins were then struck. They were excellent, both artistically and as regards weight and fineness; but for that very reason, and because the old coins had not been withdrawn, they very quickly disappeared from circulation. A payment of £100 sterling at that time included ten shillings' worth of the new coins at the outside. When we put good coins into circulation with inferior ones, we give an advantage to the clipper, but we do not improve the state of the currency. The only remedy against clipping is to call in all the bad money and deprive all the defaced coins of legal currency.

The English Legislature was well aware of this. With the Re-coinage Act of 1696 the old silver money was put out of circulation, and all were given the opportunity of exchanging their old money for new.¹ It was not long, however, before even the new silver money had been in great measure forced out of circulation. It has already been observed that gold as well as silver had been coined in England since the middle of the fourteenth century. The gold coin in William the Third's time was the guinea, which contained 118·65 grains of fine gold; its rate of exchange was not permanent, but was fixed by law from time to time. In the year of the Re-coinage Act it was 22 shillings. The legally recognised ratio between the two metals was therefore 15·93.²

In the first half of the eighteenth century, however, the production of gold increased considerably without any proportionate increase taking place in the production of silver. As a result, the ratio in value between the two metals declined steadily during that century. Hence, on the proposal of NEWTON, in 1717, the guinea was reduced to 21 shillings, which gave a ratio of 15·21 between the two metals. If this course had been persevered in—if, with each fall in the ratio between gold and silver, the guinea had been fixed proportionately lower,—the two metals would have continued to circulate

¹ This is all described in MACAULAY's *History of England*; see also THOROLD ROGERS, the *First Nine Years of the Bank of England*. Oxford, 1887.

² Twenty shillings in silver represented 1718 grains (see *ante*, p. 404), therefore 22 shillings represented 1890 grains, and $1890 \div 118 \cdot 65 = 15 \cdot 93$.

side by side in England. But this was not done. After the year 1717 the guinea remained at 21 shillings, although the relative value of gold continued to fall, and in 1760 the ratio between the two metals had actually dropped to 14.14.

Under these circumstances "GRESHAM'S Law" could not fail to assert itself. This is one of the oldest known economic laws governing money, and is named after GRESHAM, Queen Elizabeth's financial agent, by whom it was discovered. Whenever the double standard is applied with a ratio other than that which really exists between the two metals, the over-rated will displace the underrated metal. Suppose, for instance, that gold were worth 14.14 times as much as silver in the world market, and that in spite of this the gold coins were minted with a weight and fineness corresponding to a ratio of 15.21, gold would then be overrated by quite $7\frac{1}{2}$ per cent. According to GRESHAM'S Law, it would then become advantageous to coin gold only, while silver money would gradually disappear from circulation. This theory is not only confirmed by experience, but is also based upon the truth that, when an object can be attained in either of two ways, the one cheap and the other dear, the cheap way will be chosen. Suppose you owe a debt of 100 guineas, and the law permits you to discharge it by paying either 100 guineas in gold or 2,100 shillings in silver. Suppose also that, having a sufficient quantity of both coins in hand, you are in a position to choose your mode of payment. You find that if you were to melt down your 2,100 shillings into a bar, you could get $107\frac{1}{2}$ guineas for the bar, owing to gold having become cheap in relation to silver, silver therefore having become dear in relation to gold, in the world market. There can be little doubt as to which course you would select. The 2,100 shillings would go into the melting-pot, and the 100 guineas would be used to pay the debt.

GRESHAM'S Law assumes that the coinage of unlimited quantities of both metals is permitted, otherwise it does not apply. A great profit could be made in Holland at the present time by coining silver florins, but, for reasons to be explained presently, their coinage is not permitted. The result is, that, although the ratio in value between gold and

silver as *metals* is now something like 31·1 to 1, that between Dutch gold and silver money is only as 15·62 to 1. This means that the silver florin in Holland is worth much more than the 145 grains or so of silver, of which it is composed. If, when, in the last century, gold fell relatively to silver, the coinage of guineas had been suspended or restricted, they would probably have retained their original price. A decrease in the value of the raw material of an article causes a decrease in the value of the article itself, only when the working-up of the raw material is not impeded in any way. This also applies to money. The guinea was formerly worth 15·21 times its own weight in silver; the reason why, when gold had fallen, the guinea was only worth 14·14 times its weight in silver lay, not only in the fall, but also in the fact that any one was at liberty to have gold coined into guineas. Under these circumstances it was inevitable that gold should become the sole standard metal. The double standard continued to be recognised by law, it is true; but once the official ratio ceases to coincide with the real ratio, the double standard exists in name only, and the one metal is preferred to the other in commerce. In England the preference was accorded to gold, and now we know why.

The double standard has been rightly named the *alternative* standard. With an official ratio of 15·21 we prefer to pay in gold when the real ratio happens to be less; but our preference changes altogether as soon as that ratio happens to be *more* than 15·21. England has learnt this also by experience; the history of her currency is interesting in every way. Her standard would have been changed again if Parliament had not intervened in time to prevent it. The fall in gold during the first half of the eighteenth century was due to a great increase having taken place in the production of gold, concurrently with a more moderate increase in the production of silver; but after some time the production of silver increased, while that of gold declined.¹ Owing to this the ratio between the two metals kept on increasing after the year 1760; about the year 1800 it was 15·68. Had the English Government

¹ According to SOETBEER's figures the estimated average yearly production of gold and silver respectively in the undermentioned periods was as follows (in kilogrammes):—

now let things take their own course, GRESHAM'S Law would have asserted itself once more. Just as it had caused silver to be discarded when gold was at a premium, so would it have caused gold to be discarded when the premium was on silver. This was perfectly well known in England, but it was the very thing that the Government did not want to happen; the gold standard having once been established, the people were not disposed to break with it. By a law of June 21st, 1798, the coinage of silver money was forbidden "provisionally."¹ After that, GRESHAM'S Law could no longer operate, for, however profitable the coinage of silver might become, the Government would not permit it. Eighteen years later the provisional prohibition was made absolute. When the currency was regulated in 1816, gold was declared the sole standard, and silver coins were reduced to the rank of money, of which no person was obliged to accept more than £2 sterling in payment of a debt. The shilling, which, in Elizabeth's reign, had been increased to $\frac{1}{8}$ of a pound troy, or 85·9 grains of fine silver, was then reduced to $\frac{1}{8}$ of a pound troy, or 80·7 grains, the other silver money being reduced in proportion. At the same time it was enacted that in future no more guineas of 21 shillings and 118·65 grains of gold, but sovereigns of 20 shillings and 113 grains of gold, should be coined.

This is the position of the British coinage at the present day, at least so far as the United Kingdom is concerned; for Scotland² and Ireland (the former since 1707 and the latter since 1825) have the same coinage as England and Wales. The British Colonies have different systems. Canada reckons

	Gold.	Silver.		Gold.	Silver.
1618-1700 . . .	10,765	341,900	1741-1760 . . .	24,610	533,145
1701-1720 . . .	12,820	355,600	1761-1780 . . .	20,705	652,740
1721-1740 . . .	19,080	431,200	1781-1800 . . .	17,790	879,060

¹ Thirty-eighth of George III. cap. 59. "Whereas, from the present low price of silver bullion . . . a small quantity of silver bullion has been brought to the Mint to be coined, and it is therefore necessary to suspend the coinage of silver for the present: Be it therefore enacted," etc. etc. Cf. *Silver and Gold*, by DANA HORTON (Cincinnati, 1877), pp. 75, 196.

The same author subsequently wrote an exhaustive treatise on England's transition from the silver to the gold standard; the work is entitled *The Silver Pound*.

² The pound Scots had so depreciated that twelve of them were equal to one pound sterling. Cf. KERR'S *History of Banking in Scotland* (Glasgow, 1884), p. 23.

in gold dollars, while the sovereign has a fixed value in the colony. Australia and South Africa have the same money as the mother country. British India, however, has its own coinage system, which, in view of the important change which it underwent in 1893, we must describe at some length.

Up to that time British India had had the single silver standard based on the rupee (divided into 12 annas), which contained 165 grains of silver. So long as the ratio between gold and silver remained at $15\frac{1}{2}$ the rupee was therefore worth about 1s. 10½*d.* in English money,¹ but it was bound to depreciate when the ratio became less favourable to silver, seeing that the coinage of rupees was permitted to an unlimited extent. That the depreciation actually took place we already know. The average ratio between the two metals was 15·56 in 1872, 18·17 in 1882, and 23·72 in 1892, and the rate of exchange of the rupee kept falling the whole time. In order to put a stop to this, the Indian Government adopted a measure which attracted universal attention and produced momentous results, inasmuch as it compelled the United States to cease its purchases of silver. On June 26th, 1893, it forbade the further coinage of rupees otherwise than for the account of the Government.

As a result, silver has ceased to be the standard metal in British India, for its value no longer determines that of the rupee. The relation between the raw material and the manufactured article has been severed. Not altogether, it is true, for in the event of a considerable rise in silver, or a considerable fall in the rupee, it might be profitable to melt rupees. But failing either of these contingencies, the relation is entirely severed. In December 1894, silver fell to about 27½*d.* per oz., which gave a ratio of 34·3 between the two metals, and caused the 165 grains of silver composing the rupee to fall to about 10*d.* in value. But the rupee itself never fell so low as that. At the end of 1894 it stood at 1s. 0¾*d.*

Thus the measure has been successful to a certain extent,

¹ x = 1 rupee.
 1 rupee = 165 grains of silver.
 $15\frac{1}{2}$ grains of silver = 1 grain of gold.
 113 grains of gold = 20 shillings.
 x = 1s. 10·6*d.*

but it has not achieved all it was meant to achieve. The rupee can no longer fall by means of *additional coinage*; but there is nothing to prevent its falling in consequence of a *temporary or permanent reduction of the demand for money*, and such a reduction may take place at any time. It must have taken place already, seeing that the rupee was worth about 1s. 4d. when the measure came into operation, and that it has not been able always to remain at that value. The Government wished to prevent depreciation of the coin in relation to gold, but only removed one of the two causes which could bring such depreciation about. In order to impart fixity of value to the Indian coinage in relation to gold, the Government should have done more: it should have provided some sort of outlet for such rupees as might become temporarily or permanently redundant owing to a reduction of demand.

Better provision was made against another danger, one which has not yet arisen, however. Whenever the making of an article is prohibited the article may become cheaper *in spite of*, but it may also become dearer *in consequence of*, the prohibition. In forbidding the coinage of the rupee the Government made it possible for that coin to rise in price, and although the prospect of its doing so has never yet presented itself, it was nevertheless conceivable that it might have to be faced some day. It was therefore enacted that English gold should be accepted by the Indian Treasuries at the rate of 1s. 4d. the rupee, and that the Government should be empowered to purchase and coin silver on its own account. We may now practically regard 1s. 4d. as the maximum value of the rupee. Its minimum value depends upon the price of silver as a metal in the world market.

We have already said that the Indian currency system can no longer be described by a simple term, and such is the case; it is possible, however, to indicate the general class of coinage to which the rupee now belongs. Money, of which any one can have an unlimited amount coined at the Mint in return for a very small seignorage, is usually called *standard money*, because, in so far as fluctuations in its value are concerned, its fate is linked with that of one or other of the precious metals.

The British sovereign, the Dutch ten-florin piece, the twenty-franc piece, the gold dollar, the twenty-mark piece, in fact all the gold coinage now current in Europe and North America, comes under this denomination. On the other hand, when we speak of *token money* we refer to money, of which the unrestricted coinage is not permitted, and which the Government itself does not coin in such quantities as to reduce its value to that of the metal of which it is composed. Until a few years ago the divisionary money (of bronze, nickel, etc.) was the only token money; but since the coinage of silver money of full legal tender has been prohibited in almost all the countries where such money is in circulation, the amount of token money has greatly increased. The expression token money hardly needs to be explained. When we say that a shilling is token money, we mean that a shilling indicates not so many grains of silver, but the twentieth part of a pound sterling. When we speak of the silver florin as token money we mean that that coin indicates just a tenth part of what a ten-florin piece is worth. Similarly, the rupee has become token money; it is no longer synonymous with 165 grains of silver, but represents such a number of shillings and pence as can be obtained for a rupee.

The great increase of token money within our time must be regarded as a truly retrograde movement in the domain of currency. Such money should play a very subordinate *rôle* in the currency of any country; almost the whole of the money should be standard money. The *rôle* of the Government should in the main be confined to guaranteeing the identity of the coin with a certain quantity of precious metal of a certain fineness. The inducement to counterfeit token money is greater in proportion to the value which such money acquires from its status of token money. The danger that many people may take advantage of this circumstance is slight in the case of the divisionary coins, as these are not legal tender beyond a certain sum. But other token money is legal tender for any sum, and therefore presents much stronger inducements for counterfeit coining. When the counterfeiting of such money takes place on anything like a large scale, the object of the Legislature in prohibiting its coinage is partly frustrated. That object is to prevent the money from depreciating, therefore it

is deprived of its status of standard money; but when more of it gets into circulation from illicit sources, it becomes redundant.

Instances of counterfeit coining have, so far, been comparatively rare in most countries. In fact, there are countries having a very large circulation of token money where cases of counterfeit coining are altogether unknown. Even such countries, however, should not be blind to the danger. The events which have made it necessary to reduce large quantities of standard money to the rank of token money are much to be regretted. They have brought about conditions in the domain of currency, under which some suffer less seriously than others, but which no one can regard as healthy.

The closing of the British-Indian Mint to silver in 1893 was a measure of world-wide importance. (The Mints of the Native States have remained open, but their rupees are not current in the territories under direct British administration.)

Previously there had always been an outlet for redundant silver in British India; this is worth noting, for it affords another proof that commerce in the precious metals is subject to the same laws as commerce in any other article. It has been contended by some that the statistics of imports of silver into British India point to a different conclusion; when we examine the figures attentively, however, we find that this is not so. When, following upon the gold discoveries in California and Australia, that metal became redundant in Europe and supplanted a large amount of silver, it was expected that British India would absorb large quantities of the latter metal. And it did. The net imports—*i.e.* after deducting exports—of silver from British India during the period 1854-55 to 1860-61 were, on an average, 82,457,000 rupees per annum. They rose to a much higher figure in the years of high cotton prices;¹ in the period 1861-62 to 1865-66 they reached 126,361,000 rupees per annum. India was now so glutted with silver, and cotton prices fell so considerably, that some reduction became inevitable.² The net yearly imports in the period 1866-67

¹ See *ante*, p. 392.

² This is a point which requires some explanation, and we shall return to it later.

to 1868-69 averaged 70,053,000 rupees; in the period 1869-70 to 1875-76 they had fallen to 26,588,000 rupees.

If silver had not fallen in value after the year 1872, we should most probably have seen a reflux of that metal from India. Before 1875—in which year silver averaged 56 $\frac{7}{8}$ d. per oz.—the fall was not very great; it was sufficient to prevent the return of silver from India, but not to stimulate importation of silver into India to any great extent. Matters now changed, however. The average price of silver per oz. was :—

From 1876 to 1882	.	.	.	52.33d.
„ 1883 „ 1889	.	.	.	46.44d.
„ 1890 „ 1892	.	.	.	44.17d.

Accordingly we find imports of silver into India increasing very much, as the following figures show :—

Period. ¹	Average Yearly Imports of Silver (Rupees).
From 1877 to 1883	72,076,000
„ 1884 „ 1890	88,323,000
„ 1891 „ 1893	120,203,000

This could not continue after the enactment of June 26th, 1893. Owing to a special circumstance—the Mint remained open for silver during the first three months of the fiscal year 1893-94—the net imports continued high for the year ended March 31st, 1894, when they amounted to 137,198,000 rupees. In the following year, however, they fell to 63,292,000, while for the first eight months of the fiscal year 1895-96 they only reached 34,572,000 rupees. As a market for the disposal of redundant silver, British India can no longer be what it was in the past; and this is one reason why the closing of its Mint for silver may be regarded as a measure of world-wide importance. Another reason for so regarding it is the effect which it had on the currency legislation of the United States, of which we shall speak presently.

¹ Years ended 31st March.

§ 2

France and the Latin Union

That the French and English monetary systems have practically the same origin, may be recognised both by the fact that the word *livre* is frequently used for *franc*, and by the division of the *franc* into 20 *sous*. The *livre*, which appears to have been originally a measure of weight equivalent to 5,663 grains troy,¹ became, like the English pound, a short expression for 20 pieces of money of 12 pence each. But in France the debasement of the coinage began earlier, and was carried much further, than in England. Even by the thirteenth century it had reached such a pass that Louis the Eleventh was regarded as a reformer of the coinage when he increased the weight of the *livre* to 1,234 grains of silver by ordering *gros tournois* containing 61·72 grains of silver to be struck, and fixing their rate of exchange at 1 *sol*. Ultimately the silver value of the *livre* became reduced to 69·4 grains, or about $\frac{1}{8}$ of its original amount, assuming the first French money to have been $\frac{1}{12}$ fine.

Just a word as to the two ways in which the debasement of the coinage has usually been effected both in France and elsewhere.

One way has been by increasing the face value of existing coin. As the *livre* with its subdivisions was not real money, but only money of account, it was very easy to do this. The *gros tournois*, for instance, which had previously been worth 1 *sol* or $\frac{1}{20}$ of a *livre*, was given a value of 1 *sol* 6 *deniers* or $\frac{3}{10}$ of a *livre*. This had the effect of reducing the *livre* from 1,234 grains to 830 grains, if it be assumed that the *gros tournois* still contained 61·72 grains of silver. This method had the advantage of simplicity, and was therefore much in vogue; it was extensively applied in Holland as late as the sixteenth and seventeenth centuries. Thus we find the proclamation of the States-General, dated 1579, fixing the value of the silver *carolus* at 1 *florin* 8 *stuivers*, whereas in

¹ It is generally supposed that under Charlemagne the ancient Roman pound was superseded by the heavier German pound of 5,663 grains. Cf. *Het Verzamelen van Munten en penningen*, by Dr. C. M. Dozy (p. 57).

1542 that coin was issued for a *florin*. In 1581, its value was fixed at 1 *florin* 10 *stuivers*; in 1586, at 1 *florin* 13 *stuivers*. The silver *carolus* contained about 293 grains of fine silver, and the *florin* was then like the French *livre*, money of account. The result of these changes in the face value of the *carolus* was, a reduction in the amount of silver contained in the *florin* from about 293 grains in 1542 to $\frac{293}{1.40}$, $\frac{293}{1.50}$, and $\frac{293}{1.65}$ grains in the years 1579, 1581, and 1586 respectively. Those who resorted to this method of debasing the money of account were said to "increase the value of the coins" (*augmenter la valeur des espèces*), and the reverse process was spoken of as a reduction of their value. Thus when Maximilian raised the value of the Dutch pound from 194 to 349 grains, he was said by his contemporaries to have "reduced the value of money."¹ Each coin was taken as representing less in pounds and fractions of a pound than before, the effect being to increase the metallic value of the pound.

But there was another method, which consisted in reducing the weight or fineness of the coins without altering their face value. By declaring the *gros tournois* to be worth 1 *sol* 6 *deniers*, instead of 1 *sol*, the metallic value of the *livre* was reduced by one-third; but the same effect would have been produced if the quantity of silver in the *gros tournois* had been reduced by one-third, and that coin had been allowed to retain its face value of 1 *sol*. In either case the quantity of silver represented by the *livre* and its subdivisions would have been smaller than before.

Such reductions in the value of the money of account did not always result in an immediate and proportionate rise in money prices, and that was because they were frequently accompanied by a considerable increase in the seigniorage charged by the Mint. Nowadays this charge is always very moderate; in England it does not exist at all. But in the Middle Ages it was sometimes very high; we know, for instance, that in France it amounted to 50 and even 60 per cent. in the fourteenth century.² Owing to this it was not always possible

¹ Cf. WAGENAAR'S *Vad. Hist.*, chap. iv. p. 260, where the Emperor is spoken of in terms of reproach for having done so too rapidly.

² Cf. *Études sur le Régime Financier de la France* (Nouvelle Série, chap. ii. p. 300), by VUITRY.

for the fluctuations in the value of money to correspond, even approximately, to those in the value of the metal of which it was composed. We drew a distinction above between standard money and token money. Mediæval money was frequently neither the one nor the other; it was not standard money because of the high seigniorage, and it was not token money inasmuch as its coinage was in most cases unrestricted. This explains how it is that though, in the long-run, the mediæval coinage diminished in value by every debasement, yet in many cases its value did not diminish at once. In works treating of mediæval prices, those prices are sometimes expressed in grammes of silver. There is nothing to be said against this so long as no attempt is made to deduce the purchasing power of silver as a metal from such data. Besides the reasons already given for not attempting this, there is the further one, that many coins may for a time have possessed a value far exceeding that of the metal which they contained.

In connection with what has just been mentioned, the early history of the French currency specially merits our attention; for nowhere else have changes in the metallic value of the money of account been so frequent and so great. The recent history of that currency has acquired importance for another reason. From 1803 to 1873 France made a more genuine attempt to apply the double standard than she had ever made before.

We know what the expression *double standard* means. The mere fact that both gold and silver money are in circulation, and are legal tender for any amount, in a country does not signify that that country has the double standard; for the silver money may be token money by reason of its coinage being greatly restricted, or perhaps altogether forbidden. One hears sometimes of a "double standard combined with prohibition of the coinage of silver." The expression is inadmissible, and is a contradiction in terms. To prohibit the coinage of silver, and permit that of gold alone, can only be intended as a means of preventing the value of money from fluctuating with the value of silver.

When England suspended the coinage of silver in 1798,

she abandoned the double standard *ipso facto*. She was anxious that silver should not supplant gold, as gold had previously supplanted silver. Instead of representing alternately so many grains of silver or so many grains of gold, according as it might happen to be more advantageous to pay a debt in the one metal or the other, the pound sterling was for the future always to represent a fixed quantity of gold. Free coinage—with no more than a small seigniorage—is a requisite of the double standard, the chief characteristic of which is, that it allows the course of events to determine whether the money of account shall represent so many grains of the one or so many grains of the other metal, and that no attempt whatever is made by the Government to influence matters in either direction.

The regulation of the French currency in 1803 fulfilled all these requirements. The *franc* was retained as the reckoning unit. The coinage of silver was allowed on the basis of 4·5 grammes of silver, that of gold on the basis of 0·2903 grammes of gold to the *franc*, so that the double standard was accepted with a ratio of 15·5 between the two metals. At the same time the seigniorage, which had previously been 2·53 per cent. for gold and 1·12 per cent. for silver, was fixed at 2·90 per thousand for the former and 1½ per cent. for the latter. Whether the word *franc* should signify 4·5 grammes of silver, or 0·2903 grammes of gold, or both at once, would in future depend upon the ratio of value that happened to exist between the two metals. At a ratio of 15½, the two kinds of coin would remain in circulation together; if the ratio became higher, silver would supplant gold; if it became lower, gold would supplant silver.

This is what GRESHAM'S Law would have led one to expect, and so things actually turned out. It will be worth our while to follow them in detail. From 1803 to 1820 there were 9 years in which the ratio was greater, and 9 years in which it was less, than 15½; one would therefore expect that the quantities of both kinds of coin minted would be about equal, and so they were; during that period there were coined 875,000,000 *francs* in gold, as against 1,018,000,000 *francs* in silver, including silver divisionary money. From 1821 to 1847 gold was constantly getting dearer; the bulk of the

money coined during that period should therefore have consisted of silver. And so it did; the amount of silver money coined was 2,778,000,000 *francs*, as against 301,000,000 *francs* in gold. Next we find gold supplies coming from California and Australia; again the ratio between the metals fell, and it is interesting to see how the fall affected the output of the Mint. The following figures will show this:—

Period.	Mean ratio of gold to silver.	Output of Mint.	
		Gold Coin.	Silver Coin.
1848-1852	15·67	448,000,000 <i>francs</i>	543,000,000 <i>francs</i>
1853-1856	15·35	1,795,000,000 "	102,000,000 "
1857-1866	15·35	3,516,000,000 "	55,000,000 "

Then the production of silver increased, while that of gold fell off, and the British-Indian demand for silver, which had been very strong during the American Civil War, became weaker. This caused gold to become relatively somewhat dearer; the mean ratio between the two metals was 15·62 in the period from 1867 to 1873. Forthwith the coinage of silver recovers its importance, the output of the Mint for those years being 878,000,000 *francs* in gold, as against 587,000,000 *francs* in silver. If a stop had not then been put to the unrestricted coinage of silver, the French currency would have reverted to the condition in which it was before 1848.

The reason for amending the legislation of 1803 will be mentioned presently; we must first consider the beneficial effects produced in France by the double standard from 1848 to 1866. Let us recall what took place. From 1831 to 1840, the annual production of the precious metals amounted to £2,750,000 in gold, and £5,218,000 in silver; the production of silver therefore greatly preponderated. Towards 1850 a change in the opposite direction was brought about by the production of gold, first in Russia, and afterwards in California and Australia. The annual output was:—

		Gold.	Silver.
From 1851 to 1855	. .	£27,417,000	£7,750,000
„ 1856 „ 1860	. .	£27,833,000	£7,917,000
„ 1861 „ 1865	. .	£25,417,000	£9,833,000

the total value of the precious metals produced in the whole period from 1851 to 1865 being £403,333,000 in gold, and £127,500,000 in silver.

What could be expected now, but that gold should fall considerably in relation to silver? As a matter of fact, many people prepared themselves for such a fall, and were loud in their praises of the sagacity of the Dutch Legislature, which, as early as 1847, had resolved to demonetise gold. People of the present generation can scarcely realise that in times so recent as the early fifties, gold gave rise to as much anxiety as does silver in these days in countries whose coinage is composed largely of silver. At that time it was prophesied, even by recognised authorities on the subject, that, if America and Australia continued to put large quantities of gold on the market year by year, that metal would sink greatly in value in relation to silver.

Their fear has not been realised. In April 1847 gold was about 16 times as valuable as silver; in March 1859 the ratio was rather more than 15. Soon after this it rose, so that for the period 1857-66 we find the mean ratio to have been 15·35. There can be no doubt that this was largely due to causes already mentioned in the previous chapter. But these causes would not have sufficed to prevent a fall of a certain importance in the value of gold relatively to silver, if France had not come to the rescue. That country was getting rid of millions of pounds' worth of silver, and acquiring gold in its place.¹ The greater part of its currency had previously consisted of silver; now it changed to gold. Thus France helped to keep up the value of the metal, of which the production had increased, while at the same time she placed large quantities of the other metal in

¹ Official statistics show that the value of gold imported into France in the period 1853-70, exceeded that of the gold exported during the same period by £199,960,000, while in the case of silver the exports exceeded the imports by £91,400,000 (*Währungspolitik und Münzstatistik*, by O. HAUPT, Berlin, 1884, p. 54).

the market. Of course the increased production of gold under these circumstances could not fail to result in a fall, not only of gold, but also of silver. But the fall of the two metals combined was not so great as that of gold alone would have been, if, instead of the double standard, France had at that time had the single silver standard. And this explains how it was that in the years 1867-70 the mean ratio between gold and silver was once more brought up to the level at which it stood in the period from 1803 to 1820, that is to say, at 15.58.

To dispel any doubt which we might entertain as to the truth of GRESHAM'S Law, we have only to consider carefully the events recorded in the history of the currency in France in the present century; it is impossible for facts to speak more forcibly than do those which are there recorded of the period from 1803 to 1873. But the same source also supplies us with data for judging the system of the double standard.

They point clearly to the conclusion that, however it may operate when applied over a very wide area, the double standard can only work mischief when applied to a single country or to a small number of countries. There can be no doubt that it has been very fortunate for mankind that France should have taken up the gold that had become redundant and supplied silver in exchange for it; but nobody will contend that France herself has benefited by this policy. Great movements in her money market have frequently resulted from it. The gold was not always forthcoming when the silver had disappeared; the silver did not always make way as soon as the gold had appeared. Thus strong alternations in the stock of bullion were inevitable, and such alternations are never good for a country. But a serious objection to the double standard when applied over a comparatively small area is that, as the overrated always supplants the other money when either of the two metals depreciates to any great extent, this leads to a general depreciation of the currency. The depreciated money remains, the other is rejected or expelled. A monetary system attended with this disadvantage is certainly not the one to choose.

France had been aware of this all along, and had conceived a certain dislike towards the double standard. This attitude

was very clearly manifested in 1867. In that year an international monetary conference was held in Paris, at which all the countries, except Holland, voted in favour of a single gold standard. The events of 1870 and 1871 prevented France from acting in conformity with this vote. But when Germany shortly afterwards took steps to substitute the gold for the silver standard, so that there was reason to expect large imports of silver from Germany, France realised the necessity of revising her monetary system without further delay. For if the double standard were to be retained, the reverse of what had happened after 1848 was sure to follow: gold would disappear from circulation, and give way to silver, just as silver had previously given way to gold.

At that time France was no longer free to regulate her currency according to her discretion. On December 23rd, 1865, she had entered into a convention with Belgium, Switzerland, and Italy—Greece did not join until 1868—for a uniform regulation of the currency. The following were the chief provisions of this convention, which was to enter into operation on August 1st, 1866, and expire on January 1st, 1880. The French currency of 1803 was to serve as a basis, subject to the proviso that all silver coins below the 5-*franc* piece were to rank as divisionary money. The coins of the one country were not to be declared legal tender in the other countries, but were to be accepted by the Exchequer in the respective countries, so that they should become virtually current there. Each of the signatory States should be free to coin divisionary money up to the limit of 6 *francs* per head of its population, and such money should be legal tender for any sum up to 50 *francs*. The States that have signed the Convention form what is called the Latin Union. Spain does not belong to this Union, but in 1868 she regulated her coinage on the same basis as that of the Union.

The system of the double standard was not maintained for long by the Latin Union. On January 31st, 1874, the signatory States agreed that the coinage of large silver money should be limited to a sum to be determined annually for each of them; and when on November 5th, 1878, they resolved to prolong the convention for a period of six years, they agreed that the coinage of large silver money should be entirely

forbidden within the Union. We need not mention the further measures subsequently agreed to by the Union from time to time. These deal with the rights of the respective States as regards their own silver money, and the question of the divisionary coinage.¹ What chiefly concerns us here is that the agreement of 1874, and more definitely that of 1878, involved the abandonment of the double standard, a measure which had been adopted in England as early as 1798. There too the double standard had been in operation, and silver had been supplanted by gold. As soon as there was a danger of gold being supplanted by silver, England, like the Latin Union, adopted means to prevent it.

But when England prohibited the coinage of silver, she had scarcely any more silver money left, except the divisionary coinage; the Latin Union, on the contrary, still had large quantities of silver coin at its disposal. Much had been disposed of, but it may be assumed that a part of what had been exported came back again after the fall in silver, and the quantities of silver coined since 1866 regarded by themselves have not been inconsiderable. They amounted to:—

£25,000,000	in France (1866-78)
£14,360,000	„ Italy (1866-79)
£14,000,000	„ Belgium (1866-76)
£320,000	„ Switzerland (1866-76)
£600,000	„ Greece (1866-76)

making a total of £54,280,000. This sum corresponds approximately to that of the silver reserves held by the central banks of the Latin Union at the beginning of 1896.² The amounts in circulation must be considerably greater. All this money has now become token money, like the rupee since 1893, with this difference, however, that whereas in British India the rupee is the sole legal tender, in the Latin

¹ Particulars on the subject will be found in the *Handwörterbuch der Staatswissenschaften*, Part IV., pp. 1246-1248.

	Silver.	Gold.
² Bank of France . . .	£49,480,000	£77,480,000
Belgian National Bank	800,000	3,280,000
Bank of Italy . . .	2,120,000	11,960,000
Swiss Banks . . .	480,000	3,360,000
Totals . . .	<u>£52,880,000</u>	<u>£96,080,000</u>

Union there is standard money as well as token money. It has of course been necessary to aim at preserving a fixed ratio of value between the two kinds of coins, and except for slight deviations—which might have been prevented—this aim has, up to the present, been realised. We shall show later that up to a certain point central banks are capable of ensuring this fixity, especially where the gold reserves are sufficiently large.

§ 3

Germany and Austria-Hungary

It is only since recent times that a uniform German monetary system can be said to exist; for there were formerly many different currencies in Germany, and as in political, so in currency matters, the unity has been achieved by slow steps. The first step towards its achievement was taken as long ago as 1837.

On August 25th of that year, a convention was concluded between Bavaria, Wurtemberg, Baden, the Grand Duchy of Hesse, Nassau, and Frankfort, by which all agreed to adopt a *guilder* of which $24\frac{1}{2}$ could be coined from a *mark* of silver. As the *mark* contains 3608·3 grains, the South German *florin* of 1837 contained 147·3 grains, a little more than the Dutch *florin*, which, since 1839, has contained 145·8 grains of silver. On July 30th of the following year, a similar union was formed in the North. As the convention of 1837 had put an end to the diversity in *florins*, so the convention of 1838 put an end to that in *thalers*: the *Vereinsthaler* was to consist of $\frac{1}{4}$ of a *mark*, or 257·7 grains of silver. By an agreement concluded on January 24th, 1857, these two systems were combined and at the same time united with the Austrian system. It was decided that instead of 147·3 grains, the *florin* should in future consist of 146·9 grains of silver, and that the *thaler*, instead of 257·7 grains, should in future contain 257·0 grains of silver. The effect of this was to establish throughout the whole of Germany and Austria the ratio of 1 *Vereinsthaler* = $1\frac{3}{4}$ South German *florin* = $1\frac{1}{2}$ Austrian *florins*. Hamburg, however, retained its *courant mark* of 102·8 and its *mark banco* of 129·9 grains of silver,

and Bremen its *louis d'or thaler* of 17 grains of gold, so that uniformity of currency was still far from being an accomplished fact.

It was not until after the consolidation of the German Empire that such uniformity was achieved. Under the Act of the Constitution, the power to regulate the coinage was transferred from the various State Legislatures to the Imperial Diet, and that body made use of this power for the first time on December 4th, 1871. It was enacted by Imperial law that the coinage of silver should be suspended and that a new coin should be struck, containing 110·6 grains of gold, and being equivalent to 20 *marks*; for henceforward money was to be reckoned in *marks* and no longer in *thalers* or *florins*, 3 *marks* being held equal to 1 *thaler*. A second law, completing that of 1871, was passed on July 9th, 1873. It enacted that no more silver money was to be coined at all except as divisionary money, and that the existing silver money should be gradually called in and melted down. This law, therefore, showed a final resolve to adopt the single gold standard, although the Government was left a certain amount of freedom of action in respect to the old money. That money consisted of two kinds of coins: those which fitted in with the new currency, like the *thaler*, and those which did not, like the *florin*, the *Hamburg mark*, and the Bremen *louis d'or thaler*. The process of getting rid of these latter kinds of coins began, and before long they had disappeared entirely from circulation, together with the old divisionary coinage. Of the silver obtained in this way the German Government used a part for conversion into £19,100,000 worth of new divisionary coinage, and sold the rest. Between September 30th, 1875, and December 31st, 1878, no less than 108,153,539 ounces, and afterwards a further 6,073,087 ounces, thus a total of 114,226,626 ounces of silver, worth about £25,000,000, were put on the market by Germany.

After May 1879, however, little more silver was called in and re-coined. When some 200,000,000 of the *thaler* had been demonetised, the German Government decided to defer the demonetisation of the rest. The price of silver had fallen considerably, so that a great loss would have been incurred by demonetising any more of those coins. Probably other reasons

also weighed with the Government in their decision: such as the fear of strengthening still further the demand for gold, or of becoming unpopular with the supporters of the double standard, whose numbers had been gradually increasing. At any rate, since the spring of 1879, all efforts made in the Imperial Diet to induce the Government to resume the demonetisation, that is, to give full and final effect to the law of July 9th, 1873, have proved unavailing. Consequently the German currency is now in the same hybrid condition as that of France. Only a part of the coinage is standard money; all the rest, estimated at from 400,000,000 to 450,000,000 *marks*, is token money. The bulk of this, however, lies in the vaults of the Imperial Bank, which, in January 1896, had a reserve of £12,000,000 in silver, as against £28,000,000 in gold.

Of the many events that have taken place during the last twenty-five years in the domain of currency, the reform which we have been describing is one of the most important, in so far as it gave the signal for the closing of the Mints for silver in all the countries of Europe that had previously permitted unrestricted coinage of that metal. But has it done more than give the signal, and would not the same thing have happened if Germany had retained the silver standard in 1871? The production of silver was increasing considerably at the time; this, of itself, would have caused the ratio between the two metals to rise beyond 15·5 to a sufficient extent to bring about the result that, in future, only silver should be offered to the Mints in the countries of the Latin Union. Is it likely that this would have been regarded with equanimity in countries where there had already previously been a leaning towards the single gold standard? And would the German Empire have adhered to the silver standard even though the Latin Union had prohibited the further coinage of that metal? It is unfair to speak of the reform of the currency in Germany as if it were responsible for all the disturbances that have taken place since 1871-73 in the monetary systems of the world. It is not Germany, but the imperfect condition of economic science in these days, that we should blame.

For at that time the double standard had been condemned

almost everywhere by economists. People had not yet realised that the double standard works unsatisfactorily only when applied to a relatively small area, and that, when applied universally, it is very useful. Proof of the truth of this contention cannot be given just yet; we merely wish to point out here that failure to recognise its truth is the sole cause of all the trouble of which we now complain. It was thought then that a choice must be made between the two metals. This view was held in the countries of the Latin Union, as well as in Germany; and once disposed to take that view, people felt impelled to choose gold. In this, Germany took the initiative; the Latin Union followed. But if Germany had not taken the initiative, the Latin Union would probably have done so a little later. The true cause of the chaotic condition into which we have fallen lies in the blindness of those who, at that time, rejected the double standard unconditionally. If Germany, after the end of the war, had been disposed to conclude a monetary convention with the Latin Union, or at least to regulate her currency on the basis of the unrestricted coinage of both metals with the same ratio between them as that which existed in the countries of the Latin Union,—then, and then only, would the trouble have been averted which arose in later years, and to which we have now to submit. As Germany did not take this course, it was inevitable, with the increasing production of silver, that a movement in favour of the single gold standard should set in and acquire sufficient momentum to overcome all resistance, at least on this side of the Atlantic. Gradually the value of silver became so unstable that no choice remained for countries which set store by a well-regulated currency.

Austria-Hungary had realised this when, a few years ago, she endeavoured to reform her long-neglected currency. Nominally the silver standard had been in operation there up till 1879; from 1,000 grammes of silver 90 *florins* were coined, so that the *florin* contained 11·11 grammes, or 171·4 grains, of silver. Really, however, only inconvertible bank notes and Government paper were in circulation in that country; and when, in 1879, the coinage of silver was prohibited, Austria-Hungary no longer had any standard whatever, since owing to the fall of silver in the world market her silver money intrinsically was even

less valuable than her already greatly depreciated paper money.¹ In 1892—that is, as soon as the state of the Exchequer would allow—means were provided for restoring the currency to a sound condition. This object could not be achieved by a law declaring the paper convertible against silver and allowing unrestricted coinage of that metal, for silver had fallen still further since 1879. Therefore, by a law dated August 2nd, 1894, the gold standard was adopted. The *krone* was declared the reckoning unit; it was enacted that the gold piece of twenty *kronen* should contain 6·09756 grammes (94·085 grains) of gold—a little more than the Dutch ten-florin piece, which contains 93·320 grains of gold. This is the basis on which the Austrian currency is regulated at the present day. It was enacted that two *kronen* should be equivalent to one Austrian *florin*.

To this day, however, no law has been enacted declaring the circulating paper money convertible, and consequently gold sometimes still fetches a premium in Austria-Hungary. Not very long ago this premium was rather heavy. Under the new arrangement, a German ten-mark piece should be worth 11·75 *kronen*; in November, 1894, it was actually worth from 12·18 to 12·54 *kronen*. Evidently the paper money was very redundant then, although attempts were made at the time in Austria to prove by figures that it could not be so. Figures prove nothing in a case like this, for they can only show the supply, and not the demand;² money may become redundant without increasing in quantity. Whenever standard money is at a premium as regards other money—we cannot repeat this simple truth too often—it *shows* that the other money is redundant. The premium on gold has now (end of March, 1896) practically disappeared, but its re-appearance will always be possible until the paper money shall have been declared convertible, and, so far as may be necessary, convertible against gold. In the interests of Austria-Hungary it is to be hoped that the preliminary steps required for this purpose will

¹ Already in 1878 the paper *florin* was at a premium as compared with the silver *florin*. Cf. Dr. M. MEES' article in *De Economist* of 1892 (p. 427), entitled, *De toestand van het muntwezen in Oostenrijk-Hongarije*.

² In this particular case the figures are not satisfactory even as regards supply. Cf. Dr. ZUCKERKANDL's article in the *Handwörterbuch der Staatswissenschaften* (*Erster Supplementband*, p. 665).

not take too long. Of these, the principal one is the calling in of the Government paper. Authority for this is provided by three laws, dated July 9th, 1894, which do not, however, sanction the withdrawal of the whole, but only of the greater part, of the paper in circulation. Once the whole of this has been withdrawn it will depend upon the Bank whether there shall again be a premium on gold or not. We have already observed that a sound banking policy can do much in this respect, even though the currency be in an unsatisfactory state.

§ 4

Holland and her Colonies

Holland too has experienced many changes in her currency, partly through her own fault and partly owing to causes over which her Legislature has had no control. Let us first trace the history of her money of account. What has been the origin of the Dutch *guilder*, consisting of 20 *stuivers*, formerly of 8 *duiten* or 16 *penningen*, now of 5 *cents* each?

In the county of Holland, as elsewhere, money used to be reckoned in pounds (*ponden*), shillings (*schellingen*), and pence (*penningen*). But there was another coin in use too,—the *groot*, also called the Flemish *groot*, and equivalent to 8 *penningen*. Thus the Dutch pound was another name for 30 *grooten*.

As early as the fourteenth and fifteenth centuries double *grooten* came into use. Subsequently they were known as *plakken*, then as *cromstaerten*, and finally as *stuivers*. Since the *groot* was worth 8 Dutch *penningen*, the double *groot* or *stuiver* was worth 16 *penningen*. This brings us to the monetary system of the Republic. It only remains to explain how the name of *guilder* has come to be applied to the sum of 20 *stuivers*.

The explanation lies in the fact that, in 1388, Duke Albrecht caused a gold coin (a *guilder*) worth 40 *grooten* to be struck. As the money of account became debased this coin acquired a higher value expressed in such money; but the custom of coining *guldens* (i.e. gold pieces) of 40 *grooten* continued, each successive issue of course containing a smaller

quantity of gold,—that of 1388 contained about 61·7 grains; the gold *florin* of the Emperor Maximilian about 38·9 grains; the *carolus* of 1520, 27·3 grains of gold. All these coins were issued as equivalent to 40 *grooten*. It was probably through this custom of issuing gold pieces, which at the time of their issue were exactly equal to 40 *grooten*, that the habit arose of substituting the shorter designation of “*gulden*” for the expression “40 *grooten*.” It was not until 1542 that a silver coin representing 20 *stuivers* or 40 *grooten* was coined, the probable cause of its issue being, that the gold piece of that value had become too small for use in commerce. The new coin was the silver *carolus*, the first silver *gulden*.

The following table shows the quantity of silver contained in the pound Dutch of 30 *grooten* in different years:—

Year.	Grains.	Year.	Grains.
1336 . . .	1323·9	1489 . . .	223·3
1371 . . .	945·8	1490 . . .	356·6 ¹
1388 . . .	494·8	1494 . . .	252·9
1396 . . .	450·4	1500 . . .	239·3
1432 . . .	374·8	1519 . . .	225·7
1450 . . .	399·8	1520 . . .	222·9
1480 . . .	264·9	1542 . . .	219·9

It has been stated above that in 1542 the silver *carolus* was struck. This coin was issued as equivalent to 40 *grooten*, and contained 293 grains of fine silver, nearly twice as much as the Dutch *gulden* of the present day.

The debasement of the money of account went on for many years after 1542. The nature of the process has already been described. The nominal value of existing coins was being constantly increased, and by reason of this the quantity of silver represented by a *gulden* of 20 *stuivers* was growing less and less. The silver *carolus*, containing 293 grains of silver and originally issued for 1 *gulden*, had its nominal value increased to 1·8, 1·10, 1·13, and 1·15 *gulden* in 1579, 1581, 1586, and 1610 respectively; the effect of the last of these variations being to reduce the silver weight of the *gulden* to 154·3 grains. But now the period of debase-

¹ This temporary improvement was due to the Emperor Maximilian “reducing the value of money.” Cf. *ante*, p. 413.

ment was nearing its end; from 1645 onwards the *gulden* remained approximately at its metallic value.¹ No silver coins of exactly 20 *stuivers* in value were struck between 1542 and 1681; during the whole of this time the *gulden* was only money of account, as used to be the case with the pound Dutch, and as is still the case with the pound Flemish. On September 25th, 1681, however, the Legislature of the province of Holland resolved upon the coinage of *guldens*. In 1686 that province concluded a convention with the provinces of Gelderland, Utrecht, and Overijssel, by which the *gulden* was declared current in those three provinces as well; and by a Proclamation of the Dutch States-General, dated March 17th, 1694, it was enacted that, throughout the whole of the Netherlands the *gulden* should be coined on a uniform basis, viz. that accepted by the above convention. Its weight, according to that convention, was to be 200 *azen*, or 148·3 grains.² This arrangement remained in operation till 1839, when, for reasons to be mentioned presently, a lighter *gulden* of 145·8 grains of silver was introduced. This is the *gulden* of the present day. When we remember that in 1336 the pound of 30 *grooten* had a metallic value of 1328·89 grains of silver, so that at that time 40 *grooten* were the equivalent of 1765·19 grains of silver, we find that the weight of the coinage of Holland is now one-twelfth of what it was in 1336.

It will be seen that silver was the sole standard metal in Holland both in the Middle Ages and during the Republic. Gold coins were struck, it is true; but either their value fluctuated, or they were not legal tender, or they were coined in such small quantities that their presence could not exercise any influence upon the general condition of the currency.

¹ Cf. *Proeve eener geschiedenis van het Bankwezen in Nederland gedurende den tijd der Republiek*, by Dr. W. C. MEES, Rotterdam, 1838 (p. 275).

² The old table of weight used to be as follows:—

The Dutch pound troy = 2 mark
 1 mark = 8 onzen
 1 ons = 20 engelsen
 1 engels = 32 azen.

According to VAN SWINDEN (*Goud en Zilver*, 1811), the pound contained 495·16772 grammes (i.e. 7,594 grains); so that the *aas* = 0·04806 grammes (i.e. 0·74156 grains).

Nevertheless, about the middle of the eighteenth century there came a moment when it looked as if the currency of Holland were about to undergo the same change as that which took place in the currency of England in the same period. Through custom, the *ducat*, though not a coin of legal tender, had come to be exchangeable at the rate of $5\frac{1}{4}$ *gulden*, a rate which had gradually become far too high, owing to the increasing rapidity of the fall of gold relatively to silver; for this rate of exchange corresponded to a ratio of 14·71 between the two metals,¹ while, as will be remembered, that ratio, during the first sixty years of the eighteenth century, had gradually diminished to 14·14. GRESHAM'S Law was already beginning to operate; gold had begun to flow in and silver to flow out in large quantities. The Government took various measures to stop this in 1749 and 1750. It forbade the exportation of silver, and warned the people expressly that the *ducat* was no legal tender. Far more effectual, however, than these measures in furthering the designs of the Government was the rise in the value of the gold which, as we know, followed shortly after. Silver remained the Dutch standard until the end of the Republic, as it had been from the earliest times.

This state of things was to change, however. The annexation of Holland by France affected the Dutch currency, inasmuch as the French coinage now became current in Holland as well. Napoleon left the Dutch coinage undisturbed on the basis of 2·10 *francs* to the *gulden*. When Holland recovered her independence, a new currency law had to be enacted; this was done on September 28th, 1816. Under this law all Dutch money then in circulation continued to be legal tender, and two new coins were introduced, viz., the gold ten-gulden and five-gulden pieces. This did not at first amount to a genuine application of the double standard, for those who sent gold to the Mint to be coined had to obtain a special permit on each occasion. Gradually, however, the Government became more and more liberal in the granting of these permits; while the law of 1816 remained unamended the double standard was in operation in Holland.

¹ The *ducat* contained 71·42 *azen*, and $\frac{200 \times 5\cdot25}{71\cdot42} = 14\cdot71$.

It would be an impossible task to show exactly what the metallic value of the Dutch *gulden* was in 1816, and even for a long time afterwards.

Holland was united at that time to Belgium, where money was reckoned in *francs*. By article 15 of the law of 1816 it was enacted that $47\frac{1}{4}$ *cents* should be equivalent to 1 *franc* in the Southern Netherlands. The *franc* was then both 69·435 grains of silver and 17·089 grains of gold. The Dutch *gulden* thus came to represent 146·893 grains of the former or 9·480 grains of the latter metal.

But by that very same law the silver *gulden* of the Republic—the *gulden* of 200 *azen* or 148·281 grains of silver—was retained, and the ten-gulden piece which had been introduced contained 93·444 grains of gold. In virtue of the law of 1816, therefore, the *gulden* came to represent 146·893 grains of silver or 9·480 grains of gold in the south, and 148·281 grains of silver or 9·344 grains of gold in the north. And we can arrive at yet another metallic value for the *gulden* at that period if we take as our standard the coins in common use. For Dutch silver money in those days was in the same condition as English silver money before the Recoinage Act of 1696, that is to say, it was worn and clipped. In 1820, *guldens* of full weight fetched a premium of from 5 to $7\frac{1}{2}$ per cent. A certain description of coins contained, as a rule, only 141·030 grains of silver to the *gulden*, as was ascertained by an inquiry in 1822.

The real ratio between gold and silver coincided approximately with that adopted by the French law of 1803, viz. 15·5. But the legal ratio adopted in the north of the country was $\frac{148\cdot281}{9\cdot344}$ or 15·87; consequently the gold pieces struck in conformity with the law of 1816 were quite 2 per cent. too light; instead of 93·444 grains, the ten-gulden piece should have contained 95·67 grains of gold. Such errors cannot be committed with impunity under the operation of GRESHAM'S Law; in this, as in other similar cases, the penalty was banishment for all the money that was not overrated. The gold coinage was overrated, for one; so was the clipped and abraded silver coinage. Accordingly, the full-weight silver

coins were exported, and for a while the metallic money of Holland consisted entirely of ten-gulden and five-gulden pieces and under-weight silver money.

That things should have taken this course was disconcerting to the Dutch Legislature, who had never meant to abandon the silver standard. They saw that the legal ratio of 15·87, which had been adopted in 1816, would have to be reduced, and they adopted the cheapest, but not the best way of reducing it. The best way would have been to call in the existing gold pieces and issue heavier ones in their stead; those coins were too light, and that alone caused the full-weight silver coins to leave the country. But having regard to the unsatisfactory state of the national exchequer, the Government of the day was not disposed to incur an expense which it could avoid. It saw another way of achieving its purpose. By a law dated March 22nd, 1839, the *gulden* was reduced from 148·281 to 145·813 grains, the effect of which was to reduce the official ratio between the two metals from 15·87 to 15·60.¹

Any one acquainted with the financial history of Holland will know that about the year 1844 a great change for the better took place in the condition of the public finances of that country owing to measures adopted by the then Financial Minister, VAN HALL, and other causes. Serious thoughts of reforming the coinage could therefore be entertained. The old silver money still remained in circulation. A law dated May 22nd, 1845, enacted that this money should be called in; not less than £7,166,000 worth of it was accordingly withdrawn from circulation. A few years later a new and even more drastic measure was adopted. All this time, the bimetallic system had remained in operation, and gradually the conviction grew that it was not the best system, especially for such a small country as Holland. But which of the two metals ought to be abandoned, silver or gold? After long hesitation and a great deal of controversy it was decided by a small majority to abandon gold. By a law dated November 26th, 1847, the single silver standard was restored in Holland,

¹ Interesting information as to the events which preceded this measure will be found in Dr. W. F. SCHIMMEL'S *Geschiedkundig Overzicht van het Muntwezen in Nederland* (Amsterdam, 1882), pp. 109-129.

and in June 1850 full effect was given to that law by the demonetisation of gold.¹

The system introduced in 1847 remained in undisturbed operation for quite twenty five years without a single proposal being made for its alteration in any respect. The consequences of the mistaken choice which the Legislature had made could not be foreseen at the time, but were to appear later. So long as silver retained a fixed value in relation to gold, Dutch money, though somewhat heavy to handle, was in a perfectly satisfactory condition. There was a single standard; the coins in circulation were of full weight and fineness; they were also of pleasing exterior, for the currency legislation of 1847 included provision for a new issue of divisionary coinage. Quite early in the period, moreover, uniformity of currency had been achieved between Holland and her East Indian colonies, where, by a law of May 1st, 1854, the coinage was regulated on the same basis as in the mother country. The reform of the Indian currency was indeed sorely needed; never before had that colony enjoyed the possession of a sound monetary system. Amongst the wrongs committed by Holland against her East Indian colonies was that of flooding them with copper coinage: between 1816 and 1843 alone, no fewer than 4,700,000,000 *duiten*² were coined for the use of Java and the other East Indian possessions! That copper money depreciated considerably; silver fetched a premium of 12, 16, and sometimes as much as 32 per cent. Further depreciation was prevented, it is true, by an Order issued in 1846 by Governor-General ROCHUSSEN; but notwithstanding the improvement thus effected, the Dutch East Indian currency remained in a very unsatisfactory condition until 1854. In that year a law was enacted under which the copper *duiten* were declared exchangeable for silver money, and this opportunity was utilised to the nominal value of £2,737,000. The reform of the Dutch East Indian currency cost the Exchequer a sum of £1,650,000, but it was worth the sacrifice. That the Dutch East Indian colonies have been provided with a

¹ The total cost of the reforms of 1845 and 1847 was about £833,000. Cf. *Verslag van al het verrigte tot herstel van het Nederlandsche muntwezen*, by Dr. A. VROLIK (Utrecht, 1853), p. 185.

² The *duit* = about half a farthing.—A. A. W.

sound currency, one which is practically the same as that of the mother country, has been a source of advantage to both.¹

Apart, however, from the fact that, combined with the reform just referred to, it brought about uniformity of currency between Holland and her East Indian colonies, the currency laws of 1847 had the further merit at that time of establishing uniformity of standard between Holland and most of the other countries of Europe. For about the middle of the present century there were no countries—if we except Great Britain and Portugal—where the single gold standard was in operation; and even in countries where the double standard was nominally applied, only silver money was current. Regarded in this light the choice made in 1847 had much to commend it. It brought about a fixed par of exchange between Holland and most other countries.

This state of things changed very soon, however. We have described the important change which took place in the French monetary system after 1850. Silver has been constantly losing ground during the second half of the nineteenth century. The Resolution of the Monetary Convention of 1867 alluded to above, made it probable that ere long silver would nowhere be standard metal in Europe. Circumstances have not been favourable to Holland. She placed her currency

¹ It is to be observed, however, that the work of redeeming the copper coinage in the Dutch East Indies has not yet been carried far enough. Many *duiten* remain in circulation, with the result that Dutch East Indians have occasionally to make considerable sacrifices in order to obtain silver money. The statutory period of convertibility was too short, the number of receiving-offices too small, and not all the residents realised the nature of the opportunity afforded them. Measures are now being devised to remedy these mistakes. Cf. (1) *Tijdschrift voor Ned. Indië* (June 1876), which contains an interesting article by Dr. S. C. W. NEDERBURCH; (2) *Memorie van Antwoord op het Voorloopig Verslag der Tweede Kamer betreffende het Wetsontwerp tot Verhooging van het Maximum Bedrag der in Indië uit te geven Zilveren pasmunt* (Zitting, 1889-1890, Gedrukte Stukken No. 154-155); and (3) *Koloniaal Verslaag* (1895), p. 207.

The best sources of information concerning the history of the currency in the Dutch East Indies are: *Muntwezen van Nederlandsche-Indië* (1851), by Dr. W. MEES; *Toelichting en Verdediging van enkel daden van mijn bestuur* (1853), by ROCHUSSEN; and *Handleiding tot de Kennis van het Staats—en Adm. Recht van Ned. Indië*, by J. DE LOUWER (fourth edition, 1895), pp. 435-443.

[The measures alluded to in this footnote have since, in the year 1900, been fully carried out.—A. A. W.]

on an excellent footing in 1847, but unforeseen events obliged her to alter it again. She has thus presented to other countries an appearance of fickleness in currency matters; and yet one can trace a certain constancy in the course which she has pursued. She only abandoned the silver standard when she was absolutely forced to do so. Her sole fault has consisted in failing to understand the signs of the times until it was too late. She has clung too long to tradition, and has failed to introduce a reform when she might have done so at little cost, whereas now it would cost her millions to introduce the same reform.

The Government have been in no way to blame for this. As long ago as October 30th, 1872, they appointed a Commission,¹ which set to work at once in good earnest. This Commission issued two Reports in succession. The first, dated December 28th, 1872, recommended that, for the time being, action should be limited to what was then being done in Germany, viz. that the coinage of silver should be prohibited and that of gold permitted. But no sooner had it become known that Germany had decided to abolish the silver standard than the Commission, in a second Report dated June 26th, 1873, recommended that Germany's example should be followed in this also. The Report pointed out that silver was about to suffer a considerable depreciation, which would expose it to much greater fluctuations in value than it had experienced before; that to retain it as the standard metal would be a great mistake, seeing that fixity of value is a primary requisite for any standard of value. Bills contemplating a complete reorganisation of the currency were drafted by the Commission and embodied in their Report.

How far were these recommendations acted upon?

A part of what the Commission had recommended in their first Report was put into practice at once. By a law dated May 21st, 1873, the Government were empowered to prohibit the coinage of silver until November 1st of that year, a date which was subsequently extended to May 1st, 1874. Unimportant as this measure appeared, its real significance was great.

¹ The Commission was composed of Messrs. P. P. VAN BOSSE, A. VROLIK, W. C. MEES, S. VISSERING, and A. D. VAN RIEMSDIJK.

Holland had now broken with silver as a standard metal, and thus prevented the value of her money from continuing to fluctuate with that of silver. Her silver coinage became token money, in the same way as the five-franc piece and the *thaler* had become token money. But the silver standard was not to be abandoned without introducing something to supply its place. The Government therefore adopted the recommendation of the Commission to introduce the gold standard and demonetise silver. At the end of February 1874 a general debate took place upon this proposal in the Second Chamber.

On March 2nd following, it was rejected by a small majority. The reasons for its rejection were various. Amongst them, no doubt, was the desire not to loosen the bonds which it had cost so much to establish with the Indian colonies. The Government, it is true, had declared that the monetary legislation regarding the Colonies remained an open question, but the Report of the Commission expressly affirmed, and it was the opinion of many throughout the country, that the single gold standard was not adapted to a country like Dutch East India; and there were many who refused to admit even the possibility of a severance of the union which existed between Holland and her colonies in the matter of currency.

Discouraged by so unfavourable a result, the Government allowed the period, for which the coinage of silver had been prohibited, to elapse without making any immediate proposal for its renewal. From May 1st, 1874, therefore, the coinage of silver was once more permitted.

Then followed a complete verification of what the Commission had foretold in the event of silver being retained as the standard metal. By December 20th, 1874, silver had been coined to the value of nearly £2,667,000. Fortunately, the bulk (£2,083,000 worth) of this was silver which the Netherlands Bank had purchased under the earlier laws, and as it returned to the vaults of the Bank directly it left the Mint, its coinage had no effect on the volume of money in circulation. The balance of £584,000, however, was new metal, imported for the purpose of being coined, and the amount would have reached a much higher figure but for the intervention of Parliament. The coinage of silver would have continued so

long as the Dutch *guilder* was worth more than 145·813 grains of silver bullion. The fall in the price of silver continued, as we know, for a long time; it is therefore difficult to say how many millions' worth of that metal would have poured into Holland.

Every one knew that this state of things called for new legislation. By a law dated December 3rd, 1874, therefore, the Mint was once more closed to silver, and it has remained so ever since that law came into operation. On several occasions, when the period of prohibition has been on the point of expiring, it has been extended. Not until December 9th, 1877, was it enacted that "Authority to coin silver, otherwise than for the account of the State, shall be suspended until such time as may be determined hereafter by law."

Something more was needed, however, than the re-closing of the Mint. The silver standard had been abandoned, but the gold standard had not been adopted. Holland, therefore, had no longer any standard at all; there was no longer any metal whereby the value of her money might be regulated. Her token money had become an article unique of its kind, with nothing to check or limit fluctuation in its value. Not that it could depreciate indefinitely; for it could not fall below the value of 145·81 grains of silver. In all other respects, however, it was left entirely to itself. The evil effects of this soon declared themselves. In the beginning of 1875 a thing happened which astonished many people at the time. The value of Dutch money *rose* in the foreign exchanges, while the metal of which it was composed suffered an almost continuous fall! This certainly proved how completely the two articles, the finished product and the raw material, were divorced so far as their value was concerned; but it also proved how necessary it then was that further legislation should be enacted.

The law of June 6th, 1875, was intended to meet this necessity. It re-introduced the ten-guilder piece, which, however, contained only 93·320 instead of 93·444 grains of gold, the weight of the corresponding coin of 1816. The Legislature had, in fact, assumed three possibilities. These were, that England might some day reduce the sovereign from 113 to 112 grains; that Germany might raise the twenty-

mark piece from 110 to 112 grains, and that instead of twenty-franc pieces the Latin Union might coin twenty-five-franc pieces, which would then also contain 112 grains of gold. If these three wishes are realised, and if Holland then proceeds to the coinage of gold pieces of 12 *gulden*, these latter will be equal to a pound sterling, to 20 marks, and to 25 francs! What advantage of any importance would result from this has not been stated.

The introduction of the law of June 6th, 1875, took place at a time of constantly increasing demand for money. It appears that from 1866 to 1876 the demand for money of all kinds in Holland rose from, say, £17,000,000 to £25,000,000. So long as this demand kept growing, no serious danger threatened the currency of Holland. Her token coinage could not become redundant, since there was not even enough of it; the possibility of a dearth of money was equally remote, by reason of the opportunity afforded for the coinage of gold. At the end of August 1880 the Netherlands Bank had a gold reserve of £6,670,000; and with such a reserve, what had Holland to fear? In the event of the demand for money going down again, there would be £6,670,000 in gold available for exportation.

And yet, by January 1883—that is, within two years—this reserve had dwindled down to £417,000. Various causes had combined to bring this about. The increase in the demand for money had at length come to a stop; the silver reserve of the Bank, which on July 11th, 1878, did not exceed £5,833,000, had increased to £7,667,000; the Government had issued treasury bills for considerable sums, and the greater portion of these bills had been discounted at the Bank, thus causing an increase in the uncovered note circulation of the Bank. The two things combined caused £6,250,000 in gold to be exported.

It became clear that the Legislature would have to take the currency question in hand once more. The law of June 6th, 1875, was directed against *dearth*, against *appreciation* of the currency; it provided means for preventing the *guilder* from ever being worth *more* than 9·332 grains of gold. The danger which threatened now was of the opposite kind, viz. *depreciation*. Supposing that after the four hundred and odd

thousand pounds in gold still remaining at the Bank had disappeared, there were still a redundancy of money (caused by an influx of silver from the Dutch Indies, for instance), how should this danger be averted? The only way would be for the Bank to reduce its uncovered note circulation. But a Bank can only do this by decreasing its credit operations; that is to say, either refusing to grant loans, or asking such a high rate of interest as would cause many to dispense with the services of the Bank. Either course is detrimental to the public welfare.

The Dutch Government recognised this after some time. Accordingly, on April 27th, 1884, a law was passed which may be regarded as the complement of that of 1875. It provided that, as soon as the state of the currency should render such a step necessary, the Government should have power to demonetise 25,000,000 *guilder* (say, £2,083,000) in silver and to sell the same. In view of what has been stated above, it will not be necessary to explain this law any further. It provides a safeguard against depreciation of the Dutch currency in the event of the need for such safeguard arising. Up to the present this need has not arisen. The stock of silver money in the Netherlands Bank, after reaching and remaining for a brief space of time at the figure of £8,333,000, now amounts to about £6,667,000, a figure which, though high, is not excessive. So long as it does not increase considerably, there need be no fear of a depreciation of silver money.

On April 27th, 1884, a further law was sanctioned having reference to the currency of Holland. It dealt with the issue of Government notes.

The issue of notes of this kind in Holland took place for the first time in connection with the reform of the currency between 1845 and 1850. The law then permitted limited amounts of these notes to be put into circulation in order to enable the old silver currency and afterwards the gold currency to be called in without much expense to the Government. The notes were paid to those who brought coin to the Mint for demonetisation, but were to disappear from circulation within a short time. After the gold had been demonetised,

however, it was found that the notes were greatly liked as money. They filtered back very slowly. Then it was decided to give them a permanent place in the currency of Holland. Under the provisions of the law, the old notes had to be withdrawn, but on April 26th, 1852, the Government was authorised to issue new notes of 10, 50, and 100 *gulden* to an amount not exceeding 10,000,000 *gulden* (£833,333). This maximum was raised to 15,000,000 *gulden* (£1,250,000) by the law of April 27th, 1884, just referred to.

The provisions at present applicable to these notes are as follows. They are exchangeable for cash at the Netherlands Bank, but the Government must enable the Bank to cash them. In order that the Government may at all times be in a position to do so, sums of 4,344,700 *gulden* in 3 per cents. and 18,788,000 *gulden* in 2½ per cents. have been inscribed in the Register of the National Debt, under the title of a "Fund for ensuring the Convertibility of Government Notes against Coin." The Finance Minister has authority to raise money on this stock whenever the state of the Exchequer shall render such a step necessary, "as a result of the redemption of the notes against specie." Subsequently, by the law of August 7th, 1888, renewing the Bank charter, the Netherlands Bank was empowered to advance the necessary sums to the Government on the aforesaid security.

These provisions would afford ground for many objections but for the fact that the law of August 7th, 1888, contains two important clauses, which would enter into operation if ever the State were to decide to issue notes beyond the amount of 15,000,000 *gulden*. In that case the Bank would have no authority to advance money to the State to enable the notes to be cashed, and the State would forfeit its share in the profits of the Bank. It is therefore very unlikely now that the present maximum will again be raised, and no serious objection can be made against a circulation of 15,000,000 *gulden* (£1,250,000) in Government notes.

It was strange, nevertheless, that a decision increasing the uncovered paper circulation should have been taken just at a time when it appeared necessary to guard against redundancy of money. It was thought by many at the time that the new notes would displace a corresponding amount in

notes issued by the Netherlands Bank, and that for that reason they would not displace any gold or silver money. But the fact that these notes displace bank paper does not suffice to prevent their displacing gold or silver; they must displace *uncovered* bank paper. As the circulation of such paper chiefly originates in discounts and loans, and as the demand for credit was not diminished by the issue of the Government notes, the new paper did actually produce increased redundancy of money in Holland. It was only the slightness of this increase that justified the raising of the maximum issue in 1884.

§ 5

The United States of America

The United States of North America occupy far too important a position in commerce to permit of our passing over their currency legislation without comment. Surely no country has exercised a greater influence in currency matters generally in the course of the nineteenth century. The increased gold output of America after the year 1848, her increased silver output in our own time, the issue of paper money during the Civil War, how that paper money was made convertible after the termination of the war,—all these facts have had an important influence on the monetary systems of the world.

It is only since 1792 that America has had a Mint of her own. It was then, too, that the currency was regulated. The dollar was accepted as the reckoning unit. Silver dollars of 371·09 grains, and gold pieces of 24·69 grains per dollar were to be coined. Consequently the double standard, with a ratio of 1 : 15·03, was adopted.

This ratio was too low, however, and became increasingly so with the almost uninterrupted rise in gold which took place in the course of the nineteenth century. To provide against this a measure was adopted, which strongly resembled that to which recourse was had in Holland in 1839. In Holland the ratio was too high, and the silver money was reduced in weight. In America it was too low, and the gold pieces were reduced. This happened in 1834. On June 28th of that

year, the dollar was reduced from 24·69 to 23·19 grains of gold, a weight which was increased to 23·21 grains under the currency law of January 18th, 1837. The ratio between 20·21 and 371·09 is as 1 : 15·99, and the mean ratio between gold and silver in the world market from 1831 to 1840 was 15·75, and from 1841 to 1850, 15·83. The difference between the accepted ratio and the real ratio did not suffice to prevent a considerable quantity of silver being coined between 1834 and 1846 ; but a change in this respect took place when the production of gold increased, and the ratio between the two metals decreased steadily in consequence. The coinage of gold became strongly preponderant.

Then, with the Civil War, came the issue of Government notes, which were declared irredeemable in January 1862. They suffered considerable depreciation, so that on July 11th, 1864, 100 dollars in gold were equivalent to 285 dollars in notes. After the war, matters improved, it is true, but it was long before the notes were again at par—in other words, before the premium on gold had disappeared. For it was not until the law of January 14th, 1875, that the “Greenbacks”—as these notes were called—were declared redeemable against specie, and it was provided that the redemption should not begin until January 1st, 1879.

But to return to the monetary system. The law of January 18th, 1837, confirming the double standard still remained operative. The decline in the ratio between the two metals below the accepted figure of 15·99 had previously forced silver out of circulation ; but as early as 1873 the ratio rose to 16·29,¹ and a further rise was expected. North America then did what many other countries had done already. By a law dated February 12th, 1873, she prohibited the coinage of silver otherwise than into divisionary money and trade dollars.

Soon, however, there arose a party in the United States to whom this measure proved a source of anxiety. What they

¹ The ratio between gold and silver is obtained by dividing the London price of silver (expressed in pence) by 943. One ounce of gold, troy-weight, yields £3 : 17 : 10½ in sovereigns, *i.e.* 934½*d.* The metal in the sovereign is ⅔ fine. An ounce of silver, however, does not mean an ounce of pure silver, but an ounce of silver of the same fineness as the shilling, *i.e.* ⅔. Thus the figure 934½ has to be multiplied by ⅔, and the product is 943. A silver price of 57½*d.* per ounce—the lowest price in 1873—gives a ratio of 16·29.

feared—not unreasonably, as the sequel proved—was that the strong demand for gold, which would gradually manifest itself, might cause a rise in the value of that metal and a general fall in prices. For America was not the only country that required gold, so said the leaders of this party: Germany required it too; so did Holland; so did the Latin Union; everywhere in Europe either the silver standard had been abandoned or its operation suspended. Would there be gold enough to meet all this demand? Would it not be better to give silver a place—if only a subordinate place—in the currency?

These views prevailed all the more because it was greatly to the interest of the United States as a silver producing country to favour measures which would prevent silver from depreciating. The result was the acceptance, on February 21st, 1878, of what was called the “Bland Bill,” whereby it was declared the duty of the Government to cause to be coined every month not less than two million and not more than four million silver dollars of the same weight and fineness as the previous dollars; furthermore, to arrange with the Latin Union and other countries for the holding of a Monetary Conference, intended to bring about the international adoption of the double standard on a uniform basis.

The Monetary Conference took place in Paris in 1878; it was followed by a second in 1881, and by a third at Brussels in 1892. None of these gatherings led to anything; nevertheless, the United States Government persevered in the course on which it had entered. The law of 1878 was replaced on July 14th, 1890, by the “Sherman Act,” which entailed a further and considerable increase in the purchases of silver. The silver coinage provided for in the previous laws demanded a minimum of 18,559,000 oz., and a maximum of 37,118,000 oz. of silver per annum; but now 54,000,000 oz., or nearly three times the minimum of 1878, had to be purchased annually. The total purchases of silver by the United States Government under both laws amounted to 429,000,000 oz.¹ The silver production of the whole world for the years 1878 to 1893 is estimated to have been

¹ Calculated from data given on pp. 31 and 32 of the Annual Report of the Secretary of the Treasury on the State of the Finances for the year 1894.

1,704,000,000 oz., so that the effect of the Bland and Sherman Acts was to create an artificial demand for just about one-fourth of this production.

Not all the silver coined in accordance with these Acts was put into circulation, and of the silver purchased under the Sherman Act only about one-sixth was converted into dollars. But practically the whole of that metal got into circulation in the shape of silver certificates and Treasury notes,—two special kinds of Government notes. On July 1st, 1894, no less than \$461,672,165 worth of these notes were in circulation.

Nowhere has a worse policy been adopted in regard to currency during the second half of the nineteenth century. One can understand a country, which circumstances have placed in the possession of a very large quantity of token money, not being prepared to incur a heavy cost in reducing that quantity; but what other State has dreamt of creating such money? And yet this is precisely what was done in America. Wishing to impose a powerful check upon the movement in favour of gold, why did she not introduce the single silver standard? Such a policy would, at least, have been logical. The one adopted was illogical. It did not abandon the gold standard, for it refused to sanction the unlimited coinage of silver dollars, and yet it did what was bound to jeopardise the maintenance of that standard.

The rapid growth of the population, combined with the considerable extension of the inhabited area of the United States in those years, prevented the effects of this mistaken policy from being so detrimental as they would probably have been under other circumstances. If France were to take to coining at the rate of from twenty to thirty million five-franc pieces per annum, gold would very soon begin to pour out of that country, supposing that the Bank were willing to part with it at par, or else gold would fetch a premium. But the demand for money in the United States rose considerably at that time. If we may believe the carefully prepared statistics of the "Treasury Report"¹—and many of the figures which it contains have been obtained in such a way as to make it tolerably

¹ Cf. 1894 Report, p. 115.

certain that they are approximately correct—there were in circulation in the United States :—

In 1878,	\$15·32	per head,	with a total population of	47,598,000
„ 1882,	22·37	„	„	52,495,000
„ 1894,	24·28	„	„	68,397,000

It was more especially between 1878 and 1882 (years of great development) that the increase was very strong.¹ The monetary circulation had previously been very small; now it was considerably enlarged. The total on July 1st, 1878, was \$729,132,634; on July 1st, 1882, \$1,174,290,000; and on July 1st, 1894, \$1,660,808,708. This represents an increase of over \$900,000,000 dollars in sixteen years, while the quantity of silver coin, silver certificates, and greenbacks put into circulation under the laws of 1878 and 1892, though large in itself, reached a much smaller sum than the above, viz. \$524,000,000.

A period arrived, however, when the policy which had been pursued with regard to the currency began to cause great anxiety; this was in the summer of 1893, after the coinage of rupees had been stopped in British India, and a great fall in the price of silver took place in consequence. The apprehension caused by this fall was attended by a circumstance which gave rise even to far greater uneasiness, and that was, that the considerable increase of money which the Sherman Act continued to cause had at length begun to tell on the stock of gold. The silver dollars, which had been put into circulation at much more than their metallic value, could not be exported; neither could the greenbacks or bank notes; nobody abroad would have accepted either the coin or the paper as a medium of payment. Any redundancy in the circulation, therefore, inevitably resulted in the exportation of gold. And the exportation of that metal exercised an influence upon a figure whose movements people were in the habit of following with peculiar interest. Of the \$449,000,000 in Government notes issued at the time of

¹ So rapid an increase in so short a time is remarkable, but not unexampled. As already stated, the monetary circulation of Holland increased 50 per cent. between 1866 and 1876, viz. from £17,000,000 to £25,500,000.

the Civil War, there still remained in circulation \$346,681,016 on January 1st, 1879, the day on which those notes became redeemable. The Government did not call them in, but made it a rule always to hold a sum of at least \$100,000,000 in gold available at the Treasury to ensure their convertibility. There is other gold besides this in the Treasury vaults—large quantities, in fact; but at least \$100,000,000 worth of that metal is supposed to be held exclusively for the purpose referred to. This was not enjoined by any law, but in the popular mind it was regarded as having the force of law, and at first the rule was adhered to. The Report of the Secretary of the Treasury for the year 1894, already cited,¹ shows how much gold the Treasury had in reserve at the end of each month since June 1878, for the purpose referred to; at first it was \$103,000,000, but after a few oscillations the sum was more than doubled, so that in April 1888 it amounted to \$213,000,000. Then followed a period of decline, however. Thus the amount

In April	1889	was	\$197,000,000
„ „	1890	„	186,000,000
„ „	1891	„	141,000,000
„ „	1892	„	119,000,000
„ „	1893	„	97,000,000
„ September	1893	„	93,000,000

This gave rise to a positive panic, all the more because it happened at a time when confidence was greatly shaken by the results of excessive speculation. Not every one understood the nature of the danger that was threatening; but a conviction spread through all ranks of society that matters were in an unhealthy condition, and that the Sherman Act was to blame. The repeal of that Act was strongly advocated, and was accomplished on October 1st, 1893, after a vigorous and prolonged agitation. How necessary it was for the agitation to be brought to a successful issue without further delay is evident from the fact that, although the coinage of silver had been stopped, the sum held by the Treasury to guarantee the convertibility of the notes had fallen as low as \$54,975,607 at the end of July 1894. The excess of

¹ P. 443.

exports over imports of gold reached \$80,000,000 in 1894, and \$70,000,000 in 1895.¹ It must here be repeated that a quantity of money, even when it is not on the increase, is not guaranteed against redundancy unless it consist entirely of standard money, or of paper convertible against standard money; for the demand for money may diminish temporarily or permanently.² The repeal of the Sherman Act was a useful measure, but it did not undo the mischief which had been wrought from 1878 to 1893.

In spite of all that has happened, the silver party have not lost courage. They are strongly represented, more especially in the Senate, where, as recently as February 1st, 1896, a proposal was adopted in favour of the unrestricted coinage of silver. On the 14th of the same month, however, this proposal was rejected by 216 against 91 votes in the Second Chamber of the Legislature.

¹ The following table shows for each year from 1870 onwards, how far the exports exceeded the imports of gold, or *vice versa* (the *plus* sign indicates excess of exports, and the *minus* sign excess of imports):—

Years.	Dollars.	Years.	Dollars.
1870 . . .	+ 42,673,184	1883 . . .	– 16,007,191
1871 . . .	+ 39,074,184	1884 . . .	+ 12,990,589
1872 . . .	+ 57,524,835	1885 . . .	– 12,225,619
1873 . . .	+ 4,958,864	1886 . . .	– 27,905
1874 . . .	+ 35,726,285	1887 . . .	– 35,744,873
1875 . . .	+ 39,065,166	1888 . . .	+ 23,565,676
1876 . . .	+ 7,555,643	1889 . . .	+ 38,928,827
1877 . . .	+ 7,352,988	1890 . . .	+ 3,832,984
1878 . . .	– 1,821,911	1891 . . .	+ 34,116,471
1879 . . .	– 74,652,495	1892 . . .	+ 59,081,110
1880 . . .	– 70,582,239	1893 . . .	+ 6,703,151
1881 . . .	– 57,795,077	1894 . . .	+ 80,409,128
1882 . . .	+ 25,318,551	1895 . . .	+ 70,586,645

² The most recent data, in fact, point to some diminution. The money in circulation in the United States on December 1st, 1895 is reckoned at \$22·61 per head of the population, the population being 70,504,000.

CHAPTER II

BANKING IN THE PRINCIPAL COUNTRIES

§ 1

Great Britain—The Bank of England before 1844

OUR knowledge of the monetary circulation of a country which has attained a certain civilisation is very imperfect if we only know what coins are current there. For nowadays most payments are effected, not in specie, but in notes or cheques; means have even been devised for replacing the latter. The total monetary circulation of Holland is estimated at £25,000,000, two-thirds of which consists of notes of the Netherlands Bank.

It is necessary, therefore, that our account of the monetary systems of the principal countries should be followed by an account of their respective banking systems. But first a word as to the sense in which the expressions bank and banking are to be understood here.

There are many kinds of banks, *e.g.* banks of issue, banks of deposit, savings banks, loan banks, commercial banks, mortgage banks, and also life-insurance banks. These different kinds of institutions have this in common, that they are all *credit* institutions. At that point, however, the relationship ceases so far as most of them are concerned. Here we propose to speak only of those banks whose chief function it is to facilitate payments; of banks which provide society with money, or enable it to put such money as it possesses to the best use; in other words, we propose to speak only of banks of issue and banks of deposit.

Here, as in the previous chapter, we shall begin with Great Britain. Not because banking originated in that country, for the earliest banks of the Christian era were established in Italy in the thirteenth century,¹ and even ancient Greece had her banks of deposit, which, it would seem, had control over considerable sums of money. But nowhere has banking advanced with such bounds, nowhere has it manifested such a variety of forms, nowhere does it present so instructive a history, as in Great Britain.

In the history of English banking—we shall presently discuss that of Scotland—the most noteworthy fact is the establishment of the Bank of England in 1694. At that time no other bank of issue existed anywhere outside Sweden, where such an institution had been established in 1658. Whether that was the reason why bank notes were altogether unknown in England would be difficult to determine. Long before the Netherlands Bank was established Rotterdam bankers used to issue paper, which was readily accepted as payment in the neighbourhood, and bore a strong resemblance to bank notes. We find no record of any similar practice obtaining in England prior to the establishment of the Bank in 1694, but it is not unlikely that it did. Even at that time there were large banking offices in London. The banking business was in the hands of the goldsmiths, one of whom—so JOHN LOCKE² informs us—held balances and deposits to the amount of £1,100,000. That notes to bearer may occasionally have been issued against this sum is quite conceivable.

The establishment of the Bank of England was not welcomed by the goldsmiths,³ who saw in it a dangerous competitor. The Bank had no monopoly, it is true; it was not until 1833 that it acquired one, and then only within a limited radius. But in 1708 it was accorded a privilege by which the growth of English banking has been powerfully influenced. In that year, the issue of notes by

¹ Cf. LATTES : *La Libertà delle Banche a Venezia dal Secolo XIII. ad XVII.* (Milan, 1869) ; ROTA : *Storia della Banche* (Milan, 1874) ; and NASSE's article on the former work in the *Jahrbücher für National-Oekonomie*, vol. xxxvi. p. 329 *et seq.*

² Ed. M'CULLOCH, p. 223.

³ FRANCIS : *History of the Bank of England*, p. 73.

any other corporation of more than six persons was prohibited. The effect of this was to permit the formation of banks of issue in England, but only of small ones, so far as the amount of their capital was concerned. And, as we shall see later on, this law was interpreted in a spirit less liberal than its text would have justified. Not a single large banking concern of any kind whatever made its appearance beside the Bank of England during a period of 125 years.

Has this institution proved itself worthy of the confidence reposed in it by the Legislature? Has it been properly managed? These questions do not admit of an entirely favourable answer. From the very first, the Bank was far too dependent on the Government, by whom the whole of its capital of £1,200,000 was borrowed at 8 per cent. as soon as the Bank came into existence. And so inadequate was the provision which the Bank had made to cover its notes that these soon became inconvertible, and were only accepted for 20 per cent. below their face value. In the last respect, however, matters soon improved; the mistake was probably due to lack of experience on the part of the Bank management. But the close relations with the Government were maintained for a long time, and disastrous results arose out of them at the end of the eighteenth century.

England, as we know, was then at war with France. In order to provide for the expenses of this war, the British Government applied to the Bank for considerable loans, and the Bank was weak enough to grant them to the amount of over £10,000,000. What effect this must have had on the gold reserves of the Bank will be readily understood. A bank cannot increase its uncovered note circulation—at least not unless that increase coincide with a corresponding increase in the demand for money—without causing just so much paper as it has already issued to become redundant. The amount of money in circulation becomes excessive. The result is, that notes are exchanged for specie, the specie so obtained is exported, and the metallic reserve of the bank thus diminished. That is what happened in England. Against a sum of £13,000,000 in deposits and notes, the Bank held only £1,272,000 in gold.

What was to be done under the circumstances? It did not seem advisable to increase the circulation any further, so the Bank decided not to grant any more advances to commerce. But commerce could not do without the assistance of the Bank, and a panic ensued. Then, by a resolution dated February 26th, 1797, and subsequently confirmed by an Act of Parliament, the Government *forbade* the Bank to cash its own notes in specie. Thus commerce was relieved. On the very next day, the Bank issued a circular announcing that it would continue to discount bills at the usual rate. But the currency of England had been reduced to a state of chaos, from which it was not to be extricated until 1821.

Thus the Bank note became inconvertible, and it soon depreciated. The extent of the depreciation may be seen from the following figures. From an ounce troy of standard gold¹ £3 : 17 : 10½, or say 3·89 sovereigns, are coined; as no seigniorage is charged in England, an ounce of gold—or so much less as the coin may have lost in weight—is always procurable for £3 : 17 : 10½ in bank paper. But in the period to which we refer no less than from £4 to £5 : 4s. sterling in paper had to be paid for an ounce of gold.² We have purposely shown the depreciation in this form because this is how it was expressed, a circumstance which has led to much misconception. “Paper has not fallen,” said many at that time, “but gold has risen.” RICARDO had to write a pamphlet to refute this strange error. It was his well-known treatise of 1809, issued for the fourth time and with an important appendix in 1811, that brought a new light to bear upon the theory of money and upon that of foreign exchanges.

It was long before Parliament took any steps towards the reform of the English currency. A Commission was appointed

¹ *i.e.* eleven-twelfths fine.

² JEVONS, in his *Investigations in Currency and Finance* (London, 1884, p. 139), gives the following figures :—

1801	.	.	.	.	£4	5	0	1815	.	.	.	.	£4	13	6
1802	.	.	.	.	4	4	0	1816	.	.	.	.	4	13	6
1810	.	.	.	.	4	10	0	1817	.	.	.	.	4	0	0
1811	.	.	.	.	4	4	6	1818	.	.	.	.	4	0	0
1812	.	.	.	.	4	15	6	1819	.	.	.	.	4	1	6
1813	.	.	.	.	5	1	0	1820	.	.	.	.	3	19	11
1814	.	.	.	.	5	4	0	1821	.	.	.	.	3	17	10½

ire into the matter, it is true, and duly issued its report famous "Bullion Report" of 1810, recommending the abolition of specie payments. In 1811, however, Parliament by a great majority rejected a proposal embodying this recommendation. A further eight years were to elapse before sound counsels prevailed. It was not until 1819 that an Act passed obliging the Bank to make its notes convertible, at to be £4:1s. per ounce of gold in 1820, £3:19:6 pence in 1821, and finally £3:17:10½ per ounce (par) on May 1st, 1823. The par rate was, however, reached, and from May 1st, 1821, the notes of the Bank of England were once more convertible.

Only a relatively short time, however, had elapsed when a change of the old state of things became imminent. Prior to that—that is, prior to its being subject to legal restrictions—the management of the Bank was anything but perfect. In many years English commerce was shaken by more than one crisis and the policy of the Bank was not calculated either to meet the crisis when it was threatening, or to allay it when it arrived. By recklessly increasing its uncovered circulation—that is, by granting advances too freely—the Bank per-

mitted its metallic reserve to fall to £1,260,000 (as against a circulation of £25,000,000) in 1825. A sudden reaction in the discounting of bills and the granting of loans was inevitable, and, as in 1797, it produced a veritable panic. It may be urged as an excuse for the Bank that it was subject at that time to the provisions of the Usury Law, and was therefore not in a position to fix such a rate of interest as it thought best. But this restriction was removed in 1834, and yet which the Bank continued to pursue an equally reprehensible policy. In 1839 matters reached such a pass that the Bank had to be had to BARING BROTHERS, who, in conjunction with twelve Paris banking firms, procured for the Bank of England an advance of £2,000,000 from the *Banque de France*. A further sum of £900,000 was procured from the same source in the same way, and so the Bank of England was saved from its difficulties by foreign aid.

All these circumstances produced a strong conviction that the legal provisions were needed in order to compel the Bank of England to pursue a better policy. Nor was it

for the Bank of England alone that such provisions were needed. Gradually a large number of private banks of issue had come into existence; most of them were small, for it was not until 1826 that the legal provision as to six members was amended in the sense of being declared applicable thenceforward only to banks established within a radius of 65 miles from London. The number of these banks was so great, and they were in many cases managed so badly, that some sort of legal provisions were needed for them as well.

But what ought to be the nature and scope of these legal provisions? This question became the subject of a heated controversy which we must discuss, seeing that it occupies an important place in the history of our science.¹ On the one side stood the school of the Currency Theory, on the other that of the Banking Principle. The former numbered among its adherents JOHN LLOYD, better known as Lord OVERSTONE; also NORMAN and TORRENS. The latter school numbered TOOKE, WILSON, and FULLARTON. The victory rested entirely with the adherents of the Currency Theory, and it is on this theory that the English Bank Law of 1844 is based.

§ 2

Currency Theory and Banking Principle

The authorship of the currency theory is wrongly ascribed to DAVID RICARDO, although it is to him that we are indebted for the grain of truth which it contains. The nature of this theory will appear from what follows.

If, asks Lord OVERSTONE—who was the first to proclaim the currency theory,—there be no bank notes in circulation in a country, can there ever be scarcity of metallic money in

¹ The best works of reference concerning this controversy are Lord OVERSTONE'S *Tracts and other Publications* (M'Culloch's edition); R. TORRENS' *A Letter to Lord Melbourne* and *Sir R. Peel's Act Explained and Defended*; and TOOKE'S *History of Prices* and *An Inquiry into the Currency Principle*; FULLARTON'S *On the Regulation of Currencies*; but above all, *Extraits des Enquêtes parlementaires anglaises sur les questions de Banque*, etc., Paris, 1865 (in eight parts).

that country? Would it be possible, for instance, for the balance of payments of such a country to become so unfavourable as to cause all the metallic money and bullion to be exported? The answer is, that it would not be possible; for, when money is scarce, its value rises, and prices fall. And when prices fall, exports increase and imports diminish, until there is sufficient money and bullion in the country once more. A nation which does not use bank notes can never, in the long-run, have too little metallic money in relation to other things. It may be a poor nation, certainly, but its capital will always include such a proportion of coined money as shall be needful.

It is different with a country which uses bank notes as well as coined money; for, in such a country, exportation of the latter does not necessarily cause scarcity of money. The balance of payments becomes unfavourable; considerable exports of gold take place; but at the same time, by granting credit, the banks greatly increase their uncovered circulation. Will prices fall in this case too? Will the balance of payments change and cause the exported gold to return to the country? There is no reason to expect that it will, because no deficiency will have arisen in the monetary circulation. In the first of the two cases described, the evil cures itself; in the second, it grows more acute. With a mixed circulation—that is, with a circulation consisting partly of metal and partly of paper—the whole of the metal may disappear without causing any reduction in prices.

What then are the means which a country using bank notes should adopt in order to prevent the whole of its gold from being exported? The law should prevent the banks from substituting paper for the exported metal; or, better still, it should compel them to reduce their uncovered circulation in proportion to the exports of metal. Suppose the stock of money required in a country to be represented by the figure 100, and to consist entirely of gold; if a quantity of this money corresponding to the figure 10 were to leave the country, there would remain 90, consequently not enough to meet the demand, and this of itself would cause prices to fall. But suppose the needful stock of 100 to consist of 50 parts gold and 50 parts paper. In this case, if, while 10 parts

of the metallic money left the country, the paper circulation were increased to 60, the total stock of money would still remain at 100, and therefore suffice to meet the demand. And if a second 10 parts of the metallic money were to leave the country and to be followed by a third and a fourth 10 parts, while the paper circulation was increased, at first from 60 to 70, then from 70 to 80, and then from 80 to 90, there would always be a sufficient stock of money in the country, and the exported gold would not return. This must be prevented. A deficiency in the monetary circulation must not be met with paper. Measures must be adopted to prevent the possibility of the whole of the specie and bullion being drained from a country, and the bank notes of that country thus becoming inconvertible.

Such is the currency theory; now let us examine its defects. First of all, it is not true that a bank invariably does wrong when it supplies a deficiency in the monetary circulation by issuing notes. We forfeit one of the greatest advantages of a well-regulated banking system when we conform strictly to the currency theory. Suppose, for instance, that a crisis has occurred, and that the demand for money has greatly increased in consequence. Will it not have a salutary effect if the bank of issue is able to meet this demand, and would it not be the height of folly to interfere with such action on the part of the bank? Or suppose that the corn crop has failed, so that it has become necessary to import large quantities of grain for home consumption. Is it not an advantage in such a case not to have to part at a given moment with large quantities of interest-bearing bonds, or cattle, or machinery, or other necessities, in order to pay for the imports of grain, and to be able to pay for them in the meantime by exporting precious metal, for which paper can be temporarily substituted? Steps must be taken to ensure the return of the exported metal; but this need not be done immediately. A well-managed bank always has a larger metallic reserve than it needs in ordinary times, and of which it will therefore be able to spare a part in times of emergency. When the time of stress has passed, the bank will gradually restrict its credits, thus enabling its metallic reserve to accumulate once more. In the meantime it will have rendered

a great service to the community, for it will have mitigated the adverse effects of the crop failure by enabling them to be spread over a more extended period of time.

There is a second mistake in the currency theory. It is not true that, in a country where no bank notes are in circulation, exportation of specie results in an immediate fall in prices and consequently in an alteration in the balance of payments. It would be so if bank *notes* were the only possible substitutes for specie; but bank *deposits* also serve as substitutes for specie. It has already been shown, in the chapter on prices, that bank notes and bank deposits differ only in form, since both take the place of specie when they are not covered by a metallic reserve. Let the needful stock of media of payment be represented by the figure 100, and suppose it to be made up of specie and bank deposits each to the extent of 50. If specie be now exported to the value of 10, but the banks at the same time grant credits to their depositors to the same amount, how is the fall in prices to take place, which the supporters of the currency theory declare to be the inevitable result of the exportation of precious metal from a country where no bank notes are in circulation? A bank of circulation issues notes payable to bearer, with which people pay each other. A deposit bank credits its depositors' accounts, and the balances produced in this way also constitute a medium of payment. Wherein does the difference lie? The difference, we repeat, is one of form only.

The exponents of the currency theory (with the exception, perhaps, of TORRENS) never discerned this. Bank notes are money, said they, and bank deposits are book entries. But we are not concerned here with calling notes and bank deposits by their right names: the question is, what functions they perform; whether both do not supply the place of specie; whether both are not capable of supplying a deficiency in the specie circulation of a country where the cheque is a very common medium of payment. The chief error of Lord OVERSTONE and his followers certainly lay in their not having understood this clearly. Their doctrine was not founded on a true conception of the bank deposit. Between the latter and the bank note they sought to establish a fundamental distinction

which does not exist.¹ To the credit of their opponents, the "Banking Principle" men, it must be recorded that they did not fall into this error. To them the closeness of the relationship between the bank note and the bank deposit was perfectly clear, and they may be regarded as having rendered a service in making it more widely known. If the controversy between the two schools had been waged round this point alone, we should not have a moment's hesitation in siding absolutely with the latter. But the adherents of the "Banking Principle" have erred so egregiously on another point in the controversy, that we find it difficult to determine towards which of the two sides we feel most attracted.

The point to which we allude relates to the question as to how far a bank can bring itself and the community into danger by an excessive issue of notes. The adherents of the "Banking Principle" hold that no danger can be incurred by either, so long as the notes remain convertible.² Should they cease to be so, then indeed too large a quantity of them may get into circulation, just as may happen in the case of notes issued by the Government, and declared legal tender by enactment. But if the bank paper be convertible, how can it ever become redundant? What the public has no use for it returns to the bank, whose offices are always ready to accept the paper in exchange for specie. A bank can only put a definite quantity of notes into circulation; any notes which it issues in excess of that quantity get returned to it under an iron law, as it were. This is proved by statistics. When we consult them we are surprised to find how little variation there usually is in the amount of notes in circulation. It was by TOOKE more especially that a clear light was brought to bear upon this, and his conclusions have been fully verified by later investigations.

¹ We ought not, however, to neglect to mention what GEORGE CLARE says in his *Money-market Primer* (London, 1893), p. 14: "To understand how differently the note was then regarded, it must be borne in mind that in those days a banker's circulation was his principal liability, and that deposits were, in comparison, but a very small item. In February 1820, to give an instance, the circulation of the Bank of England amounted to £23,000,000, and the total deposits to £4,000,000; while in February 1890 the figures are: circulation, £23,000,000; deposits, £35,000,000.

² The error stands out most clearly in FULLARTON, *On the Regulation of Currencies* (London, 1844), more especially pp. 63-65.

There is, indeed, a remarkable degree of regularity in the demand for bank notes. We do not dispute the contention of the adherents of the "Banking Principle" that, so long as bank paper is convertible, any quantity of it issued in excess of a certain sum gets returned to the bank at once.

It is strange, however, that people should ever have imagined that this constituted a safeguard against the consequences of imprudent bank management. It is precisely in the return of the notes to the bank that the danger lies. If the notes did not return, the bank that issued them could never get into difficulties. The fact is, however, that these institutions give rise to a very serious condition of things if they issue notes to excess.

For how do the notes return? By repayment of advances? Do we learn from the statistics which TOOME and others have compiled with so much care, that when a bank, by granting credit too freely, issues paper in excess of the requirements of trade, the public repays its outstanding loans, maturing bills are met and no fresh ones are discounted, so that in this way the circulation is once more reduced? Quite the contrary: the statistics show that the redundant notes are offered in exchange for specie, or used in purchasing bullion from the bank, the specie or bullion being then exported. In this way the amount of the circulation continues the same, it is true, but its components are no longer the same; "uncovered" is substituted for "covered" circulation, and the ratio between metallic reserve and note circulation becomes less favourable. This matter has already been explained, but it is so important that we propose to discuss it here once more.

Besides loans out of its own capital, let us suppose that a bank has granted advances to the amount of £10,000,000; in addition, it has circulated £8,000,000 in notes in return for bullion and specie. The bank has now

a covered circulation of . . .	£10,000,000
an uncovered circulation of . . .	8,000,000

Thus its note circulation amounts to £18,000,000, against which it holds a metallic reserve of £8,000,000. It grants loans for a further £2,000,000, but the public does not require more than £18,000,000 in notes; the extra £2,000,000

put into circulation will therefore cause a redundancy of money. It now becomes advantageous to export coin or bullion, and that coin or bullion is obtainable at the bank in exchange for notes. Certainly the £2,000,000 in notes will now return to the bank in accordance with the "Banking Principle." But will this have no effect upon the position of the bank? Its circulation will, before long, be made up as follows:—

uncovered	.	.	.	.	.	£12,000,000
covered	.	.	.	.	.	6,000,000

The note circulation will remain, as before, £18,000,000, but instead of £8,000,000, only £6,000,000 in metal will be held as a reserve against it. The bank may pursue this course for a long time. It may increase its loans up to £18,000,000, the amount of its note circulation remaining all the while at the old figure. But how will matters then stand as regards metallic reserve, that is to say, as regards the convertibility of the notes? The whole of the reserve will have been exhausted.

TOOKE's statistics plead against him instead of for him. It is just *because* of there being a limit to the amount of notes which a bank can keep in circulation that an excessive paper issue becomes possible. For the paper issue becomes excessive from the moment that a disproportion exists between the amount of notes in circulation and the amount of metal held in reserve against them.

"The question of banks of issue will always be misunderstood, and all discussion on the subject mere fencing with big words, so long as people fail to realise that a bank, when issuing paper, is simply an instrument in the hands of the public." Thus wrote a Dutch adherent of the "Banking Principle" several years ago.¹ So far as concerns the *amount* of its circulation, a bank is undoubtedly an instrument in the hands of the public; but it is not the instrument of the public in the matter of the *items* which go to make up that amount, and it is these, more especially, that one has to consider, when judging whether a note issue is excessive or not.

We should not care to give our undivided sympathy to

¹ DE GIDS (1863), vol. iii. p. 39.

either of the two schools referred to, but that of the "Banking Principle" erred in a more dangerous manner than its rival. If it had got the upper hand in England, the regulation of the banking system in that country would certainly have been far less minute in its character than we now find it; the Bank of England would have been allowed greater freedom of action, and it must be admitted that this would have been productive of a certain advantage in times of crisis. But would this freedom of action never have been abused? Would the events of 1826 and 1839 never have repeated themselves? WALTER BAGEHOT was no adherent of the "Currency Theory," and consequently no admirer of the Bank Act passed in 1844 under the influence of that theory; and yet he has frequently said in his journal, *The Economist*, when he was its editor, that although the Act of 1844 had not prescribed any excellent rules, still it had not left it to the discretion of the Bank Directors to determine what rules should be observed in the management of the Bank, and that this was one of its good features.

§ 3

The Bank Act of 1844

Let us now examine the main features of the Act of 1844—the "Peel Act," as it is usually called. At first its provisions related to the Bank of England alone, but in 1845 clauses were added having reference to the other banks of issue. We will begin with those relating to the Bank of England. As a justification of the detailed treatment accorded to this part of our subject, it is to be observed that the London money market is of great importance, and that its condition is, as a rule, reflected in the Weekly Return of the Bank of England. This Return owes its very peculiar form to the provisions of the Act of 1844.

The principle accepted is as follows. The Bank issues notes, and it does other banking business as well. In respect to the former it has no freedom of action whatever; in respect to the latter its freedom of action is complete. In other words, the Bank is a bank of issue and also a bank of deposit.

In the former capacity it is bound by strict rules ; in the latter it may do as it pleases.

The Bank consists of two departments, an Issue Department and a Banking Department. The Issue Department is a bank of issue pure and simple ; a bank of issue, however, which must not allow its paper issue to exceed a certain figure. This department may issue notes up to any figure it pleases, so long as the issue is effected in exchange for gold ; but it must not grant credit beyond a certain maximum figure. This maximum, originally fixed at £14,000,000, is increased whenever any other bank of issue in England or Wales abandons or forfeits its right to issue notes. The increase amounts to two-thirds of the amount of the uncovered notes which such bank was authorised to have in circulation. In this way the maximum has by now (February, 1896) grown to £16,800,000. Thus the sum of £16,800,000 may be invested in interest-bearing securities by the Issue Department. The Act contains no provisions restricting the Department in its choice of investments. It may buy bonds and shares, discount bills, or grant loans, according to its discretion.

But the sum standing at the disposal of the Issue Department for all these purposes is smaller than it appears. There is an inalienable Government Debt amounting to £11,015,000, in which the bulk of the £16,800,000 is invested. The balance amounts to £5,785,000 only. Let us see what becomes of that balance. The artificial character of the whole system will thus reveal itself to us.

The Issue Department gives this sum to its sister branch, the Banking Department, in exchange for £5,785,000 in various securities. These securities appear in the Bank Return under the heading of "Other Securities," immediately below the item "Government Debt." Both Departments benefit by this exchange : the one, inasmuch as it secures an investment for the balance of its £16,800,000 ; the other, inasmuch as it obtains the disposal of bank notes to the amount of £5,785,000. It can employ these in its own business, like any other deposit bank that has borrowed money from another institution. The transaction might also be described by saying that the Banking Department re-discounts a part of its bills of exchange with

the other Department, transfers to the other Department a part (viz. £5,785,000) of its loan business.

But the Banking Department receives other notes as well. It acts as banker for the Government, to whom it generally owes from £4,000,000 to £9,000,000 ("Public Deposits"), and for many private individuals and corporations, to whom it owes variable amounts ("Other Deposits").¹ Of all these sums it invests just as much or as little as it deems most prudent, and it does so in all kinds of ways. It buys Government securities, it discounts bills and grants loans (the amount due to it in respect of such discounts and loans appears in the Return under "Other Securities"), but, like a prudent banker, it always takes care that a part of the notes which it receives are kept and not invested. For, apart from the comparatively small quantity of specie always kept on hand in the Banking Department, the liabilities of that branch are not secured by any metallic reserve. If the Government or any private depositor draws on the Bank for a portion of what it owes them, the Banking Department can only make use of its stock of notes to meet the demand. It would apply in vain for assistance to the Issue Department. That branch has already given it all the paper which it is authorised to circulate otherwise than in exchange for gold, and must not issue a single pound sterling beyond that sum. The foregoing shows the principle adopted, Lord OVERSTONE'S theory put into practice.²

¹ The "Other Deposits," also called "Private Deposits," amounted to £25,000,000 sterling at the end of 1885, and to £48,500,000 sterling at the end of 1895. They consist to a very large extent of moneys belonging to private banks, it being the custom of such banks to deposit with the Bank of England such moneys as they are neither obliged to retain for immediate use at their own offices, nor disposed to put out at interest. How far the item "Private Deposits" is made up of the deposits of private banks it is impossible to say, for since 1877 it has not been the practice of the Bank of England to publish this figure; the amount must be very large, however. In 1877 all except £11,000,000 of the "Private Deposits" consisted of deposits of private banks.

² For the convenience of the reader we subjoin a balance-sheet of the Bank of England, with a few explanatory observations. This is the weekly Return for December 24th, 1894. When comparing it with corresponding weekly returns issued by foreign banks we must bear in mind that assets always appear on the right and liabilities on the left hand side of an English balance-sheet. In foreign balance-sheets the reverse order is adopted:—

The stock of money in the Banking Department is called the "Reserve,"¹ and probably no other banking figure excites the interest of so wide a circle of persons. Scarcely has the Bank issued its weekly Return, when the amount of the "Reserve"—together, in most cases, with the ratio between that amount and the deposits—is telegraphed to nearly every part of the civilised world. No paper, whose practice it is to report on the state of the money market, fails to supply this item of information to its readers, and no wonder, considering how important it is. Imagine the condition of the London market if the "Reserve" were to give out! The notes of the Bank of England might still remain convertible,² but the Bank

ISSUE DEPARTMENT			
<i>Notes Issued</i> . . .	£58,367,000	<i>Government Debt</i> . . .	£11,015,000
		<i>Other Securities</i> (the securities taken over by the Bank in exchange for notes) . . .	5,785,000
		<i>Gold Coin and Bullion</i> . . .	41,567,000
	<u>£58,367,000</u>		<u>£58,367,000</u>
BANKING DEPARTMENT			
<i>Proprietors' Capital</i> . . .	£14,553,000	<i>Government Securities</i> (to be carefully distinguished from the <i>Government Debt</i> of the Issue Department) . . .	£14,936,000
<i>Rest</i> (undivided profit) . . .	3,090,000	<i>Other Securities</i> (chiefly discounted paper) . . .	26,616,000
<i>Public Deposits</i> . . .	9,451,000	<i>Notes</i> . . .	32,093,000
<i>Other Deposits</i> . . .	48,498,000	<i>Gold and Silver Coin</i> . . .	2,065,000
<i>Seven-day and other Bills</i> . . .	118,000		
	<u>£75,710,000</u>		<u>£75,710,000</u>

The expression *Notes Issued* would be quite wrong if it had reference to the Bank as a whole, for, as the above statement shows, no less than £32,093,000 of the total sum of £58,367,000 were in stock at the Bank, so that the real amount of the *Notes Issued* was only £26,274,000. But the expression is used only with reference to the Issue Department, which is regarded as having as little concern with the affairs of the Banking Department as if the latter were a separate corporation.

¹ The expression "Stock of Notes" is also used, it is true, but in that case "Gold and Silver Coin" is not included.

² That is, assuming that it would be permissible for the Issue Department to cash the notes, even when the Banking Department was no longer able to discharge its obligations, which, from the legal point of view, seems doubtful.

would be unable to meet any demand for the withdrawal of deposits, nor would it be free to increase its credit business in the very slightest degree. This would spell embarrassment for all those who had counted upon receiving assistance from it. In ordinary times sound bills of exchange are regarded almost in the light of money, because money can always be obtained for them. When people find themselves disappointed in this respect, they are apt to become involved in serious difficulties.

The Peel Act had scarcely been in operation three years when such a state of things very nearly came about. In the autumn of the year 1847 a commercial crisis occurred in England. The peculiar feature of a commercial crisis is the strong demand for money which invariably accompanies it. Many people then dispose of their goods, and prefer to do so for ready money. Having sold their goods, they keep their money, as they have no inclination for investing it. Owing to this, the demand for money is increased in a special degree. At such a time a central bank can render signal service, for, by reason of the unshaken confidence which it usually continues to enjoy even in a crisis, it can easily satisfy the demand for money by issuing notes. Under ordinary circumstances a bank, when it increases its uncovered note circulation, diminishes its stock of gold—that is to say, the metallic reserve which it holds against those notes. But in a time of commercial crisis the notes are simply kept and stored; at such a time they serve more as an investment than as a medium of exchange. By issuing notes extensively at such a time the bank causes no danger; on the contrary, it allays much anxiety. As a rule, a crisis is nowhere so acute as in a place where a central bank either does not exist, or is hampered by too stringent rules in the matter of increasing its note circulation.

The latter was the case in England in October, 1847, and it then became evident how greatly the Peel Act had hampered the action of the Bank; or rather, what a wonderful mixture of liberty and restraint the provisions of that Act embodied. With regard to deposits the law prescribes no rules whatever; the Bank is free to grant loans on an extensive scale during the time preceding a crisis, provided they be effected by crediting the borrowers' accounts in the books of the Bank, and

not by giving them bank notes. But when the crisis has set in, and those who have accounts with the Bank apply for notes to the amount standing to their credit, or ask for new loans—this time in the form of notes,—loans which the Bank could grant more confidently at such a time than at any other, in steps the law and says that no single uncovered bank note shall be circulated over and above so and so many millions of pounds sterling.

Needless to say, such a rule could not be strictly maintained when its harmful effects were felt. On October 25th, 1847, the Government allowed the Bank, subject to certain conditions, to increase, temporarily, its uncovered note circulation beyond the statutory amount. Similar permission was again accorded on November 13th, 1857, on the occasion of another crisis; and once again, on May 12th, 1866, after the failure of OVEREND, GURNEY, and Co. Thus, on three different occasions has the Peel Act been suspended, and on each occasion has its suspension put an end to the crisis. What a curious law, one is tempted to exclaim, which can only remain on the Statute Book because the Government allows it to remain inoperative at the most critical moments!

But we judge the Peel Act too unfavourably when we confine ourselves to observing how it operates in times of commercial crisis. One good feature of the law is, that it obliges the Bank to make proper provision for a metallic reserve. Moreover, things which the Act should have prescribed have been gradually brought about by custom. Thus, although the Act lays down no rule concerning the Reserve of the Banking Department—that is to say, concerning the ratio to be maintained between that Reserve and Deposits,—yet it is universally looked upon as the duty of the Bank to see that that ratio does not, under ordinary circumstances, fall below two-fifths. It is usually much higher than this.¹ If the Reserve threatens to become too low, the financial papers raise an alarm and remind the Bank of its duty. The

¹ From 1844 to 1878 it averaged 39·4, but in recent times it has been much larger. It amounted to 44 per cent. of deposits at the end of 1892, 45 per cent. at the end of 1893, 63 per cent. at the end of 1894, and 58 per cent. at the end of 1895.

From 1881 to 1890 it was never less than £9,200,000, and amounted on the average to £13,100,000.

effect is salutary. The Act says that the Banking Department shall not receive notes from the Issue Department beyond a fixed sum, now £5,785,000 ; custom says that out of this sum and out of the notes which the Banking Department receives from the public, that Department shall always keep in reserve an amount corresponding approximately to two-fifths of the deposits. Thus law and custom together bring about a condition of things which may be regarded as fairly satisfactory. Since May, 1866, the Government has not had occasion to sanction any suspension of the operation of the Peel Act.

The law of 1844 also contains provisions concerning English banks in general. It will help the reader to a better acquaintance with these, if we begin with a description of the state of the law subsequently to 1826.

Under the bank legislation of that year the Bank of England still remained without a monopoly. Banks of issue could be established in any part of the country. Within a radius of 65 miles of London, however, the old provision of 1708 still held good. No association of more than six persons was allowed to establish, within that radius, a bank that should issue notes.

Thus no bank of issue of any importance could make its appearance within this important area—the focus of England's money trade. And did this apply to banks of deposit as well? Judging by the generally accepted view, it did. When JOHN GILBART, in 1833, published the prospectus of his *London and Westminster Bank*, and at the same time announced his intention to establish a deposit bank on the joint-stock system in London, a cry of astonishment went up. Surely, said people, the law of 1708 forbids such a proceeding!

But JOHN GILBART contended that the law of 1708 did not forbid the execution of his plan, and his contention was borne out by the law officers of the Crown. After this the law was made clearer and some additional clauses were inserted. In 1833 it was enacted that, within a radius of 65 miles from London, the Bank of England alone should have the right to issue notes, so that not even small banks were in future to be allowed to issue notes within this radius.

On the other hand, all restrictive clauses relating to banks of deposit—in so far as they might be held to exist in the Act—were expressly repealed. Consequently, in 1833, the position became this: For London and within a radius of 65 miles, the Bank of England secured a monopoly, but only so far as concerns the issue of notes. In all other respects there was perfect freedom.

But in 1844 this perfect freedom was restricted. Since that year, it has not been permitted to establish any more banks of issue in any part of England. Those in existence at the time were allowed to retain their right of issuing notes, but a limit has been placed on the amount of uncovered notes which each of them may issue. It has already been stated that, whenever a bank loses or abandons its right to issue notes, such right reverts to the Bank of England to the extent of two-thirds. The tendency of the law of 1844 is to make the Bank of England the only bank of issue in the whole of England and Wales.

§ 4

Joint-stock Banks

It was necessary that we should fix our attention first of all upon the Bank which constitutes the centre of the monetary movement, and which, so long as it possesses the principal store of gold, must always continue to fulfil a very special rôle. We now pass on to the joint-stock banks that have grown up around the Bank of England in the course of the nineteenth century, and threaten to overshadow that institution. The number of joint-stock banks in England and Wales at the end of 1894 was 103.¹ Most of them are deposit banks, as only 36 of them have the right of issuing notes, and the note issue of these 36 banks is very insignificant: at the end of 1894 it only amounted to £1,061,745. On the other hand, the deposits of all the joint-stock banks, except the Bank of England, in so far as they had made returns—which 100 of the 103 banks had done—amounted to no less than

¹ Supplement to *The Economist* of May 18th, 1895.

£419,025,893.¹ We find among them the London Joint-Stock Bank, with £14,443,000; the London and Westminster Bank—JOHN GILBART'S Bank—with £25,722,000; the London and County Bank, with £36,075,000; the National and Provincial Bank of England, with £42,743,000. In addition to these joint-stock banks, there are many private banks, but their importance is no longer so great as it used to be; the joint-stock banks have superseded them. From a very interesting essay by WALTER BAGEHOT, entitled *Lombard Street*, we learn how this happened. Returns are available concerning 40 private banks; their deposits at the end of 1894 are given as £65,831,159, while 20 banks which still retained the right to issue notes had a note circulation of £434,790. The rise of the joint-stock banks coincides with a strong development of banking in England. The new institutions infused fresh life into banking. Having plenty of capital, they established branches in many parts of the country, sometimes in many parts of the same town; and being managed by capable men, they succeeded so well in anticipating the various wants of their clients that they became indispensable. Exclusive of the Bank of England, the joint-stock banks of England and Wales now possess a paid-up capital of nearly £75,000,000, and have branches to the number of 2,624. The National Provincial alone has 170 branches.

It is no exaggeration to say that the prosperity of England's commerce and industry is partly due to the development of her banking. For a well-developed system of banking confers two advantages, both of which must be esteemed of great importance, viz. facility in transferring capital, and economy in the use of coin. The first of these two advantages has been discussed in the chapter relating to interest. It was there pointed out that, although most credits are granted without the intervention of banks, the intervention of these institutions is in many cases very necessary. The banks bring together those who own, and those who are in need of capital; they form, as it were, a bond between the two classes. The deposit bank, more

¹ As compared with £241,500,000 at the end of 1881.

„	„	294,200,000	„	„	1885.
„	„	380,700,000	„	„	1890.

especially, renders valuable services in this respect. The relation of daily intercourse in which it stands towards its customers gives it an insight into their affairs, so that it can judge how far they and the bills which they present for discount may be accepted as security, and can meet their wants in the matter of credit in such manner as shall best accord with the special circumstances of each. Many a purchase and many a sale would be impossible but for the mediation of the bank. The person who brings goods to the market requires ready money, or, failing that, a debtor of recognised trustworthiness. He does not, as a rule, accept personal or real security, or the acceptance of a third person, in lieu of cash. But the bank gives credit in all kinds of ways. Thus it acts as intermediary between buyer and seller. It willingly accepts those securities and bills with which a vendor is not, as a rule, content. Often, too, it is closely acquainted with the purchaser, and knows that, though he is not considered of much account in the commercial world, his property is fully sufficient to entitle him to credit. One of the parties now becomes the creditor, and the other the debtor of the bank. Its books record a deposit or current-account balance, on which it will, perhaps, pay a small interest, for which interest it will be amply compensated by what it will receive from the person to whom it has granted credit. We have already explained all this at some length,¹ and have, therefore, no need to enlarge further upon it. But it was necessary to call it to mind here. It was necessary to point out that a strong and many-sided development of banking is of no small importance for the distribution of capital. It is certainly an inestimable advantage to a country to have one great central credit institution; but no central credit institution can satisfy all needs so well as can a number of deposit banks which, established in various parts of the country, having relations with all kinds of people, and not hampered too much by legal provisions or rules, are able to adapt themselves to local usages and needs.

A well-developed banking system, besides facilitating transfers of capital, also greatly promotes economy in the use of metallic money. The chief source from which English

¹ See *ante*, pp. 191 *et seq.*

banks draw their profit is interest. Consequently, it is to their advantage to work with as small a reserve as possible, and wonderful is the ingenuity with which they pursue this object.

They endeavour, in the first place, to avert the possibility of sudden heavy withdrawals. With this object, they usually fix the interest on deposits at rates which are higher in proportion as the term of notice for withdrawal is longer. The result of this is, that the amount of money, which the bank is liable to be called on to pay out at any given moment, is much smaller than it would otherwise be, and the bank is able to manage with a smaller reserve.

Another means for enabling the banks to work with a small reserve is supplied by the Clearing House. Every bank receives, day by day, bills of exchange or cheques which are payable at some other bank. If all the banks were obliged to discharge their liabilities in respect to such bills and cheques in cash, they would have to keep very large reserves on hand. But these liabilities are reckoned one against the other, and the place where this operation is performed is the Clearing House. The London Clearing House was established in 1775, but now similar institutions also exist in Manchester, Newcastle, Edinburgh, and Glasgow. The annual clearances of the London institution alone amount to £7,000,000,000 sterling.¹

The banks invest their money in various ways. Part of it is employed in granting advances to, and discounting bills for customers. Part is placed at interest in the Stock Exchange on the security of bonds, the borrower in such cases giving, as a rule, a surplus² of 10 per cent. But an investment is also found for a considerable part of the funds of the banks in discounting bills presented by bill brokers, and in entrusting such brokers with money on deposit.

Bill brokers—bill merchants would be a more fitting designation for them³—play a very important part in the English

¹ Details concerning the organisation of the work of the London and other Clearing Houses will be found in a little work by W. HOWARTH, entitled *Our Clearing House System and Clearing Houses* (London, 1884).

² i.e. that for every £100 borrowed, £110 value is deposited as security.—A. A. W.

³ As rightly observed by G. CLARE, author of the little work entitled *A Money-Market Primer*, second edition (London, 1893), p. 141.

money market. They are much more than intermediaries, for they trade in bills of exchange. In a great place like London, it is not possible for every one to judge of the standing of each individual firm; the bill brokers can do this better than any one else. The banks prefer to draw a little less interest on their investments in bills of exchange, when, by doing so, they can secure themselves against all risk; hence they prefer to take paper endorsed by a bill broker of good standing. It is the operations of this class of men that prevent a state of things in which one bank would have too large, while the other would have too small, a reserve; for, by the nature of his business, the bill broker is both a receiver and a disbursing of money on discount. As already stated, the bill brokers also receive money on deposit from the banks at a moderate rate of interest, and subject to an undertaking to return the money whenever it may be required. The bill broker's office, or discount house, serves as a kind of bank to the ordinary banks. It is the establishment to which the latter have recourse when their reserves happen to be redundant, or the reverse. Of course there may be times when the demand for money among bill brokers exceeds the supply; in such times the broker has no alternative but to apply to the Bank of England. Thus, while he competes with that institution in ordinary times, he is obliged to seek its aid in times of monetary pressure.

This has caused the Bank of England not to regard the bill brokers with favour. While frequently charging less than its so-called minimum rate of interest to customers for whom it regularly discounts bills, the Bank never recedes from that minimum in its dealings with bill brokers. Until a few years ago it refused to discount for bill brokers on any terms, and would only accept their paper as security for short loans. It was not until July 1890 that the Bank modified its attitude in this respect. Brokers' bills had previously to mature within fifteen days; now the limit is sixty days. But in spite of any rule which the Bank of England may think fit to make, it knows very well, and so do the bill brokers, that it cannot refuse help to the latter in times of monetary pressure. The whole monetary fabric rests ultimately upon the Bank of England, inasmuch as every one relies on the

Bank being able to supply money in the event of the usual monetary stocks becoming exhausted. The English system has been described as an inverted pyramid, with the Bank Reserve for its apex. Up to a certain point the description would apply equally well to every centralised credit institution, to that of Holland no less than to those of France, Germany, and Austria. But in England the burden which rests on the one point is particularly heavy. In ordinary times, the reserves of the deposit banks are very small, and consist partly of money deposited with bill brokers, the bulk of which money the latter in their turn have invested. Thus the burden is in constant danger of becoming excessive, and on several occasions that danger has seemed very serious indeed. No money market is so well supplied in ordinary times as that of England; but then no money market is subject to more violent disturbances; sometimes the Bank of England is quite unexpectedly called upon to increase its advances very considerably. Thus between May 7th and 16th, 1866, these rose from £20,800,000 to £30,900,000; between September 26th and October 15th, 1878—*i.e.* after the closing of the City of Glasgow Bank—from £17,300,000 to £23,000,000; and again in November 1890—when **BARING BROTHERS** got into difficulties, the crisis produced by which was of brief duration only, because of energetic measures taken by Mr. **LIDDERDALE**, then Governor of the Bank—from £25,100,000 to £32,100,000 in the course of one week.

It must be admitted, however, that the disturbances are not increasing either in frequency or violence. We have seen that banking has made great progress in England during the last sixty years; commercial crises have not increased proportionately with this progress; on the contrary, they have become less frequent. Those concerned appear to be getting more alert in noting the signs of danger; the interests at stake are too many and too great to permit any lack of vigilance in this respect to go unpunished. Moreover, as has already been stated, the Bank of England now keeps a larger reserve than formerly, and it guards against any excessive reduction of that reserve by temporarily advancing the rate of interest, and, in the event of this remedy not operating quickly enough, by taking up money from the market. Those entrusted with

the management of the banks are very capable men, as a body. They have grown up under their system, and have become adepts in it, and hitches in its regular working are of rare occurrence. Who would dream of introducing such a system as that which has now been in operation for so many years in England? Nevertheless, being established, it compels our admiration, for every impartial observer is bound to admit that its working is, on the whole, excellent, and in fact improving.

It would be difficult to describe in a single word the position which the Bank of England occupies in that system. Its *rôle* is unique by reason of the great variety which characterises it. Sometimes leading, sometimes following; at one time a decisive force, at another a mere reflector or barometer of monetary conditions; often the indispensable pivot, but occasionally the mere central point of the monetary movement, the Bank of England ever remains the focus of all observation, and its policy the subject of general comment in the money market. For its character as a concrete whole, the English credit-system is indebted to the power wielded by, and the privileges accorded to, the Bank of England. That system is the outcome of the laws of 1844 and 1845, in judging which, we must not allow ourselves to be influenced solely by our consideration of the strange provisions which they contain with reference to bank reserves and the arrangement of the weekly returns. By assigning to one central banking institution the chief responsibility for maintaining the stock of gold, the law has established a condition of mutual relationship between all the banking institutions; and by laying down a strict code of rules to be observed by the central bank in the discharge of its duty, has, so to speak, invited every one to exercise supervision over that bank. But in thus supervising the administration of the Bank of England, each bank is really supervising its own administration, keeping itself informed of the general state of business. Thus each bank is encouraged to consider itself a member of one great body. One of the reasons why English banking possesses such strength, is, that it is more than a collection of institutions working independently of each other: that it constitutes a system.

§ 5

The Scotch Banks

The whole of the foregoing refers exclusively to England. In the matter of banking, Scotland has a history of her own, and very remarkable that history is.¹

The first bank of issue in Scotland came into existence in 1695. At the time of its establishment, it obtained a monopoly for a period of twenty-one years, but from the outset it was resolved by the Legislature that this monopoly should not be renewed, and when it expired in 1716 this resolution was duly acted upon. From 1716 to 1745, absolute freedom prevailed in Scotland in regard to the establishment of banks of issue. Indeed, during a great part of that time no special banking legislation whatever existed; any one was at liberty to practise the profession of a banker on any terms he pleased. It occasionally happened that coffee-house owners issued notes for a few shillings, "payable to holder at sight, in money or in drink"; or that the large banks issued "optional notes," that is to say, notes which they had the option of redeeming either at sight or at the end of six months, *plus* interest.² These abuses were put an end to by an Act of Parliament of the year 1765, forbidding the issue of notes not immediately payable in cash, and of any note for less than £1.³ Apart from this, however, the fullest freedom prevailed in banking matters up till the year 1845. And extensive use was made

¹ See SOMERS, *The Scotch Banks and their System of Issue*, Edinburgh, 1873; Dr. J. LUDEN, *De Schotsche banken en haar arbeidsveld* (in *De Economist*, 1882, vol. i. pp. 329-350); KERR, *History of Banking in Scotland*, Glasgow, 1884; and W. GRAHAM, *The One-pound Note in the Rise and Progress of Banking in Scotland*, Edinburgh, 1886.

² GRAHAM gives a fac-simile of an "optional note," dated Dundee, August 8th, 1763; the amount is £1, "or, in the option of the Directors, one pound and six pence sterling at the end of six months," and the amount is payable "either in cash or in notes of the Royal Bank or Bank of Scotland."

³ Subsequently, in 1826, when the minimum was fixed at £5 for England, it was proposed to fix the same limit in Scotland, but the proposal met with such strenuous opposition that it had to be abandoned. Even Sir WALTER SCOTT (in his letters from Malachi Malagrowther) wrote in defence of the £1 note.

of that freedom, 95 banks of issue being established in succession in Scotland.¹

Now, however, there are not more than ten of these banks. Thirty-three of the remaining 85 have amalgamated with existing institutions, while no fewer than 52 either came to grief or disappeared from the scene in some other way. Most of these last were small offices belonging to private firms, amongst whom were many who carried on banking as well as ordinary commerce; but a certain number of these 52 banks were large institutions. The Western Bank, which collapsed during the crisis of 1857, had 101 branches and £5,300,000 deposits; the City of Glasgow Bank, which failed in 1878, had £8,000,000 deposits. Thus the history of Scotch banking cannot be said to be altogether unsullied. It affords us proof that the system of free competition among banks of issue, while possessing unquestionable advantages, is by no means free from serious defects.

By a law of 1845, and conformably to the principles embodied in the Peel Act, the establishment of new banks of issue in Scotland was prohibited, and the amount of uncovered notes issuable by any bank determined. The effects of this law have not been unfavourable.² It has not impeded the development of banking in Scotland; for in no period have banks been established all over the country in such numbers, and become identified with the national existence to such an extent, as in the past fifty years; but one of its results has been, that a better understanding now exists between the banks than before, and that they have made it a rule to adopt a uniform policy in important matters. All rates of interest, for instance, are now fixed by common agreement. As the number of banks is small, and all of them are in a prosperous condition, they have no inducement for carrying mutual competition to extreme limits. They can promote their common interests as circumstances require.

Let us now take a brief survey of Scotch banking in its present form; it ought to interest us quite as much as

¹ Ninety-six, according to KERR, who, however, includes the North British Bank, which does not issue notes.

² KERR's explanations with reference to this point are worthy of note. Cf. *History of Banking in Scotland*, p. 176.

English banking, and in some respects even more. The number of depositors in Scotch banks was 420,000 about the year 1884. As Scotland had at that time a population of 3,825,000, of whom scarcely 2,000,000 can have been adults, we find that, on an average, one out of every five adults in Scotland was a depositor. This of itself shows that the banks of that country are people's banks in the true sense, and not institutions existing solely for the benefit of large traders. The small shopkeeper as well as the millionaire takes his spare money to the bank; for the minimum sum accepted on deposit is no more than £10. Hence the funds standing at the disposal of the Scotch banks are surprisingly large. On December 31st, 1894, their deposits amounted to no less than £93,296,038.

Beside this figure the note circulation is quite insignificant; at the end of 1894 it was only £6,648,158.¹ On this ground, it has frequently been contended that the right to issue notes is of little or no importance so far as Scotch banks are concerned. This contention is strongly combated by the banks themselves, however. They hold that the right to issue notes is important for them, inasmuch as it enables them to establish branches in the smallest localities. It is certain, at any rate, that these branches can now manage with reserves consisting largely of notes issued by their head offices, and thus effect a saving of interest. The number of branches of banks in Scotland is indeed very considerable; on December 31st, 1894, it was 1,007. This may not be entirely, but it certainly is in part, due to the cause mentioned. At least it is the fact that since the law of 1845 forbade the establishment of any new banks of issue, no other banks have arisen in Scotland. It seems to be impossible in Scotland for institutions not having the right to issue notes to prosper beside the existing banks, which do possess this right. It may be, of course, that the requirements of the community in the matter of banking are already so well provided for, that there would be no room for any new competitors.

Finally, we invite the reader's attention to a noteworthy

¹ On December 2nd, 1876, it still amounted to £7,069,074 (including £4,509,853 in notes of less than £5). On December 31st, 1883, however, it only amounted to £5,902,595.

feature in Scotch banking, viz. the system of what is called "cash credits," first applied in 1728 by the Royal Bank of Scotland, an institution which had come into existence the year before. A "cash credit" is an advance on current account, the borrower being only charged interest on the amount of his debit balances from day to day. Advances on this system are also obtainable in Holland, but only in large centres, and on the security of stock. In Scotland they are to be had everywhere, and generally on simple note of hand or with a personal surety. Thus, a farmer needing seed or stock, but having no money wherewith to buy it, obtains a "cash credit" from the bank with which he regularly transacts business; as soon as he gets any money, he pays some into the bank, and, by doing so, at once reduces the sum on which he will have to pay interest. The "cash credit" system is very advantageous for all parties. To the banks it occasions little loss, for they only give "cash credits" to regular customers—that is, to persons of whose solvency they are able to judge; and to those in want of credit it offers relief in a manner as easy as it is cheap.

The foregoing will show to what a high state of efficiency banking has been brought in Scotland, and what an important place it occupies in the life of the nation. There is one important point, however, which we must be careful not to lose sight of when comparing Scotch banking with that of other countries. There are wants, which are amply provided by the Scotch banks, and not by others; those wants are not neglected elsewhere, but are provided for in some other way. In Holland, for example, persons having money to spare usually place it with a stockbroker for investment on the Stock Exchange in loans on the security of stock; or they invest it by purchasing stock, which every one in Holland looks upon as a very desirable kind of property. Scotland possesses no large Stock Exchange; the practice of entrusting spare money to the banks prevails more extensively in that country than in Holland. There are other points, too, that might be mentioned. These observations are not intended to disparage the importance of the Scotch banks—in fact, they rather accentuate the importance of those banks as institutions for the circulation of capital,—but merely to warn the reader

against an error into which he might otherwise have easily fallen.

§ 6

Banking in France

For the purpose of acquiring a knowledge of banking in general, it is very useful to devote more than ordinary attention to that of Great Britain. We shall therefore be less discursive in our treatment of the principal features of banking as carried on in a number of other countries.

The first bank of issue in France was established by JOHN LAW in 1716. After its elevation by Edict of December 4th, 1718, to the status of Government Bank, the *Banque Royale*—as it was then called—increased its paper issue with such rapidity and rashness that it had to stop payment before long. We know what a fever of speculation this bank excited, and what a crisis that fever culminated in.¹ No other bank of issue was established in France until the year 1776, during the ministry of TURGOT. This second bank, or *Caisse d'Escompte*, as it was called, did not acquire a monopoly until 1787, or shortly before its existence was terminated. For, in order to make room for the *Assignats*, the well-known Government notes of the period of the Revolution, all other note issues were prohibited in France by a Decree of 1792; and, in accordance with that Decree, the *Caisse d'Escompte* was abolished on August 24th, 1793. The history of this institution is not particularly brilliant. On two occasions it had to suspend its specie payments; also, it lent the Government considerable sums, which it was subsequently repaid in greatly depreciated *Assignats*.

The prohibition to issue bank paper was withdrawn in 1796, and a few small banks of issue then came into existence in France, but were quickly outstripped by the *Banque de France*, which was established on February 13th, 1800.²

¹ See E. LEVASSEUR, *Recherches historiques sur le système de Law*. Paris, 1854.

² The history of this bank has been written by A. COURTOIS (*Histoire des Banques en France*, 2nd ed., Paris, 1881). Cf. also the article "Banques" in LÉON SAY'S *Dictionnaire des Finances*, of which the first part appeared in 1884.

In 1803 this institution—now the largest bank of issue in the world—was accorded the exclusive right to issue notes, on the understanding, however, that the Government reserved to itself the right to permit banks of issue to be established outside Paris. The Government made use of this right. In the years 1817 and 1818, three, and in the years 1835 to 1838 a further six, making a total of nine banks, were established in the provinces (departments). In 1848, however, all these banks were amalgamated with the *Banque de France*, so that since that year there has been only one bank of issue in France.¹

No rules have ever been prescribed for the Bank of France on the subject of its specie reserve. With respect to the *amount* of its note issue, however, the Bank has for some time been subject to a certain limitation. The fixing of this limit has its origin in the events of 1870. In order that the Bank might, during the war, be in a position to grant liberal advances both to private persons and to the Exchequer, it was temporarily relieved on August 12th, 1870, of its obligation in respect to paying specie for its notes. But in order to prevent the notes issued by the Bank from becoming redundant and thereby suffering depreciation, it was at the same time determined that the Bank should not issue notes beyond the sum of 1,800,000,000 francs. This maximum was increased by stages, first to 2,400,000,000, then to 2,800,000,000, and on July 15th, 1872, to 3,200,000,000 francs. In November 1874 the Bank resumed its specie payments; and to the credit of the institution it must be said that, from 1873 forward, it did everything in its power to place itself in a position to resume those payments at the earliest possible date. Thus it managed to increase its specie reserve, which averaged 762,000,000 francs in 1873, to averages of 1,130,000,000, 1,511,000,000, and 1,987,000,000 francs in the years 1874, 1875, and 1876 respectively. The Bank was not legally obliged to resume specie payments until January 1st, 1878, but long before that date it actually did so. The rule fixing a limit to the amount of notes to be issued by the Bank has

¹ For some interesting critical comments on the causes which led to the amalgamation of the banks, see *De Verhouding van den Staat tot het Bankwezen* (Utrecht, 1864, pp. 407-412), by Dr. P. VERLOREN.

been retained, however. The maximum of 3,200,000,000 francs was increased at the end of 1883 to 3,500,000,000 francs, it is true, but the proposal then made by the Government to abolish the maximum was not accepted. On January 25th, 1893, the limit was brought up to 4,000,000,000 francs.

It is scarcely necessary to observe that this is a very strange rule. What advantage can there be in fixing a limit to the issue of bank notes? No danger can ever arise out of the *amount* of such an issue; it is only from inadequacy of the reserve held against the issue that danger can arise. The ability of a bank to grant large credits, and, at the same time, maintain the convertibility of its notes, does not depend upon the smallness of its note circulation, but upon that circulation being small in proportion to the bank's metallic reserve. Even the Peel Act, which prescribes such strict rules concerning bank paper, does not limit the amount of notes to be issued; what it does limit is the uncovered note issue. The French rule possesses the defect attaching to most rules enacted on this subject: it restricts what ought to be left free, and leaves free what it ought to restrict. Only one rule need be prescribed in respect to the issue of bank notes. The maximum ratio between the sum total of cash liabilities and the total metallic reserve of the bank, should be fixed by the Government. To impose more than this rule is to impede banking; not to impose this rule is to neglect a very useful provision.

We now have a few words to say concerning the *administration* of the Bank of France. It has excited criticism from more than one quarter. There are two charges in particular of which it stands accused: the one is, excessive subserviency to the interests of the Government; the other, lack of zeal in the service of commerce.

Apart from the question as to whether these charges are merited or not, it must be admitted that the faults which they impute are the very ones which privileged banks are in most danger of committing.

The danger that a privileged bank will show excessive subserviency to the interests of the Government arises less from a sense of gratitude for the privileges enjoyed, than from

a false conception on the part of the bank of the duties which it has to fulfil. The privileged bank is a public institution, it must therefore be administered in such manner as shall accord with the public interest; and who can more truly be said to represent that interest than the Government? If the Treasury coffers are empty, and credit is low, is it not the manifest duty of the Bank to place its credit at the service of the Government, more especially in times of national danger, when perhaps there is a hostile army on the frontier, and when the preservation of the country's honour, if not of its very independence, calls for a union of all energies? Many central banks have allowed themselves to be betrayed by such considerations as these into granting large loans to the Government; the result has often been, that the uncovered circulation has grown beyond bounds, and the bank has been relieved of its obligation to pay specie for its notes. This has happened in England, in Austria, in Russia, in Italy, and also in France. During the war with Germany and shortly after, the Bank of France granted loans to the Government amounting to the respectable sum of £61,200,000, not counting a sum of £8,000,000 advanced to the city of Paris on February 11th, 1871. Thanks to the excellent way in which, on the whole, the national finances were administered, the debt to the Bank was soon reduced to a small sum, and the Bank itself seems to have done everything in its power towards being able to resume specie payments as soon as possible. Still, the Government did wrong in asking the Bank for such heavy loans, and the Bank did wrong in granting them.

In times of national trouble there is greater need than ever for guarding against a disordered currency. If the credit of the Government be low at the time, then let it issue loans redeemable within a short time and yielding a high rate of interest. If even after this method has been tried, capital still proves unresponsive, well, then let recourse be had to the drastic measure of a compulsory loan. But on no account let the currency be tampered with. The evils of war are sufficient by themselves, without the addition of those which a disordered currency would entail.

The second of the two faults alleged against the Bank of France, namely, lack of zeal in the service of the public, is

another of the errors into which a privileged bank of issue is liable to fall, especially when it is not in the position of having a great number of deposit banks to compete with. Conservatism is a rock against which an institution of this kind is liable to be borne, for the very reason that its directors know how much depends upon the soundness of their administration, and how inexcusable any action on their part would be, which led to public confidence in the paper of the Bank being shaken. Neglecting to adapt itself to the various and changing needs which it is intended to supply; being completely imbued with the spirit of routine; growing absolutely fossilised in its rules;—these are the dangers which a central bank has to guard against. Free competition provides fewer safeguards, but sometimes more life; centralisation gives greater security, but sometimes at the cost of development.

The Bank of France remained in a very backward state for a long time. Under article 10 of its constitution, it was obliged to establish branch offices wherever the necessity for such establishments should be found to exist; three such offices were accordingly established in 1808 and 1810. The result of this step proved unsatisfactory, however, and these offices were closed in 1817. No further serious effort to comply with its statutory obligation in this respect was made by the Bank until 1836; between that year and 1846 fifteen branch offices were established, and in 1848, after the abolition of the provincial (departmental) banks, this number rose to twenty-four. The law of 1857, renewing the Bank's charter, contained a provision under which, from and after the year 1867, the Government should have power to order the establishment of a branch bank in every department; but the Government made no use of this power until after the passage of a further law (dated January 27th, 1873), requiring it to do so by January 1st, 1877, at the latest. The branch offices (*succursales*) of the Bank of France now number 94, and the Bank in 1881 further extended its operations by means of the system of *villes rattachées* and the *bureaux auxiliaires*: the *villes rattachées* afford opportunities for discounting; and in places where there are *bureaux auxiliaires* bills are collected five times per month. Bills of exchange can now be offered at the *Banque de France*, payable at 261 different places—still

a small number, considering that the Netherlands Bank takes bills payable at 92 places, although the population of Holland is only one-eighth that of France.

The note circulation, too, remained small at first. The Bank neglected the true means of promoting it, inasmuch as it neglected to provide a large number of places throughout the country where cash could be exchanged for notes, or notes for cash. Before 1867, the note circulation of the Bank never exceeded £33,600,000 francs. Now it is £144,000,000, while the deposit business too has grown very much in recent years. According to the most recent report the number of depositors was somewhat over 20,000, of whom two-thirds were in the provinces.¹

§ 7

Banking in Germany

Centralisation, carried perhaps to excess, has been shown to be the main characteristic of French banking. Since the passing of the Imperial Law of March 14th, 1875, centralisation has also been acquiring similar prominence as a feature of German banking.

In Germany there were probably as many bank laws formerly as there were separate States; each of the more important States had its own bank of issue, if not more than one. Article 4 of the Law of the Constitution, however, assigned to the Central Legislative Body the duty of regulating banks, and that body fulfilled the task thus imposed upon it by passing the Law of March 14th, 1875, alluded to above.² It will be worth our while to examine this law. It resembles the English Bank Act of 1844, without being an exact copy of that Act.

In England, as we know, the establishment of new banks of issue is forbidden. In Germany their establishment is not

¹ The source of much of the information here given is *La Banque de France et les Institutions de Crédit*, by G. BOUSQUET (Paris, 1885). See also *Annuaire de l'Economie Politique* for 1882 and 1895.

² A full account of this Law is given in Dr. A. SOETBEER's *Deutsche Bankverfassung* (Erlangen, 1875).

absolutely forbidden: it is permitted, subject to the approval of the Legislature. In practice, however, this amounts to the same thing. No Government is likely to introduce a Bill conceding to a new bank the right to issue notes. But in Germany, as in England, rights which have once been acquired are respected. Thirty-three banks of issue were in existence in 1875, and all of these have retained their right to issue notes. Only the Bank of Prussia has ceased to exist, having been converted into the Imperial Bank (*Reichsbank*), with reference to which the Law contains some important provisions.

Also, in the matter of rules governing the issue of uncovered notes, the German Law agrees in principle with the English Act, though in this respect too it is less absolute.

Thus, in respect to each bank it determines the amount of uncovered paper which that bank shall issue. In the case of the *Reichsbank*, the amount is fixed at £12,500,000; and for the other thirty-two banks together at £6,750,000. In the event of any bank forfeiting or abandoning its right of issue, that right reverts to the *Reichsbank*. Since the year 1875, twenty-five banks of issue have allowed their right of issue to lapse. As a result the original £12,500,000 of the *Reichsbank* have increased to £14,670,000, and the seven remaining banks may only issue £4,580,000 of uncovered notes between them.¹

So far, the German Law corresponds exactly to the English Act. But now we come to an important point of difference between the two. So far as English banks are concerned, the issue of uncovered paper in excess of the statutory limit is positively *forbidden*; in the case of the German banks it is not forbidden, but merely discouraged; if a bank issues uncovered paper beyond the statutory limit, it

¹ The amounts of uncovered notes which these seven institutions are allowed to issue respectively are as follows:—

Bavarian Note Bank	£1,600,000
Bank of Saxony	
„ „ Frankfurt	} each 838,500
„ „ Wurtemberg	
„ „ Baden	
„ for Southern Germany	500,000
„ of Brunswick	141,500

has to pay a tax of 5 per cent. on the excess. The Germans call this the system of *Indirecte Contingentirung*, to distinguish it from that obtaining under the English Law, which they call the system of *Directe Contingentirung*. There is a further point connected with reserves, on which the German differs from the English Law. The German Law provides that the amount of notes issued shall in all cases be represented by a reserve consisting to the extent of one-third of precious metal, and to the extent of two-thirds of bills of exchange, bearing two or more signatures and having not more than three months to run. But as to reserves to be held against deposits, the two laws correspond, neither containing any provisions on the subject.

Thus the German Bank Law is not to be commended either. What is the use of restricting uncovered note circulation, be the restriction "direct" or "indirect"? That circulation may increase considerably without occasioning any danger, provided a proportionate increase take place in the specie reserve of the bank. In the case of the German *Reichsbank* the statutory limit of the uncovered note circulation now stands at £14,670,000. In the event of the specie reserve increasing to £100,000,000—it now amounts to about half that sum—the uncovered note circulation of the Bank could not rise beyond £114,670,000! What can be the object of fixing a *difference* to be maintained between two amounts which, in the interests of the safety of the Bank, should stand in a certain *ratio* to each other?

A ratio is fixed, it is true; but not simply, nor is it the correct ratio. The metallic reserve must always represent one-third, not of the total liabilities, but only of the note circulation of the Bank; the deposits may mount up indefinitely without entailing upon the Bank any obligation to increase its reserve. On the one hand we have a provision imposing needless restriction; on the other a provision allowing excessive liberty. Either the Bank should be compelled to hold a metallic reserve against *the whole* of its cash liabilities, or the matter of reserves should be left entirely at the discretion of the Bank. The German law does neither the one nor the other.

Nor is it easy to defend the provision under which two-thirds of the note circulation must be covered by bills of

exchange. The result of this is, that beyond its own capital the Bank has no source other than the deposits to draw upon for the purpose of granting loans on the security of goods and bonds. Why should this be so? Is it because advances on this kind of security are not so safe? In that case there is equally good reason for not granting them out of the depositors' money. Or can the rule be intended for the purpose of keeping the amount of such advances within limits? Hardly; for the Bank is free to accept deposits to an unlimited extent.

It will be seen that the German Law of 1875 affords much matter for criticism. On the other hand, the manner in which the central institution created by that Law has fulfilled its task is in many respects praiseworthy. The *Reichsbank* really endeavours to accomplish the purpose for which it exists. It has already established 242 branches and sub-branches, and it uses these especially for promoting the transfer of money.

Every firm of good standing established in a place where the Bank has a branch office, can open an account with that office, and have that account credited with moneys paid in, or with the proceeds of discounts and loans. For this no commission is charged; only bills of exchange and coupons paid into the Bank are subject to a moderate commission. There are three ways in which a customer can draw on his account with the Bank. He can make his acceptances payable there; he can issue cheques on the Bank; or he can instruct it to transfer a portion of the sum with which he stands credited in its books to the account of some other customer of the Bank residing in any other part of the country: thus he is able, without risk or cost, to send any sum of money elsewhere. All these facilities are extensively utilised. In 1895 the Bank received from its customers no less than £2,343,100,000, of which it paid out £511,850,000 in cash, and £1,196,250,000 in various other ways, while it transferred sums amounting to £633,600,000 from accounts of customers in one part to those of customers in other parts of the country.¹

¹ Of these £633,600,000, £58,950,000 are accounted for by the Frankfort-on-the-Main branch, £59,700,000 by the Hamburg branch, and £157,700,000 by the Berlin branch of the Bank.

It would be difficult to point to a bank which renders greater service to commerce in this respect. This transfer business constitutes one of the most important branches of the work of the German *Reichsbank*. The note circulation of the Bank, on the other hand, is relatively small: some £50,000,000 to £55,000,000, as compared with £9,000,000 to £10,000,000 in the case of the other banks.¹

§ 8

Banking in Holland

The first large bank established in Holland was the Bank of Amsterdam, a local institution founded in the year 1609.² The object with which it was founded was very peculiar. The currency was in a very defective state at the time; a large quantity of clipped coin was in circulation, and full-weight coins were so scarce that they usually fetched a premium. The Amsterdam authorities rightly regarded this as an evil; but instead of tracing it to the cause just mentioned, they ascribed it to the dealings of the money-changers and bankers, who always retained the full weight coins and only issued those that were defective, thus vitiating the currency. If only these illicit practices could be stopped,

¹ The following figures are taken from an essay by F. THORWART, entitled *Die Entwicklung des Banknotenumlaufs in Deutschland von 1851-80*, published in the *Jahrbücher für National Ökonomie und Statistik* (vol. xli. pp. 193-250). They show how slow has been the growth of Germany's bank note circulation. The figure for 1895 is added for the sake of comparison.

<i>All Banks in Germany.</i>			<i>Reichsbank alone.</i>		
Year ended Dec. 31st.	Notes.	Deposits.	Year ended Dec. 31st.	Notes.	Deposits.
1844	£5,807,500	£7,287,500	1876	£38,305,000	£9,130,500
1860	16,099,500	8,203,000	1877	35,791,000	8,367,500
1865	28,931,500	9,534,000	1878	33,186,000	8,035,000
1870	42,705,000	10,535,500	1879	39,640,000	9,272,500
1875	51,921,000	22,060,000	1880	40,305,500	8,662,500
1880	50,382,500	11,917,000	1895	66,004,400	21,935,000

² See Dr. W. C. MEES, *Proeve eener geschiedenis van het Bankwezen in Nederland* (Rotterdam, 1838), from which the following particulars concerning the Bank of Amsterdam have been taken. Many particulars relating to the currency of Holland at the time of the Republic are also to be found in that work.

all would come right, it was thought; there would be no more premium on coins, no more confusion in the currency. Accordingly, by decrees issued in 1608 and 1609, all money-changers and bankers were abolished, and, in the latter year, the Local Authority established its own Bank, which was to serve as a money-changing and banking institution combined. Any person was at liberty to open an account with this Bank and to take money or bullion thither: those who did so being credited according to the legal (if not always correct!) scale of prices. A person having a balance at this bank could draw on it by having the amount transferred to the account of some other person. Various measures were adopted with the view to rendering this institution popular. The town constituted itself guarantee for all moneys deposited with the Bank; all bills of exchange of £50 and upwards had to be negotiated and paid through its agency.

Did the Local Authority thus achieve the object which it had in view? That object was to prevent certain coins from being at a premium as compared with others; to bring about parity of value between all coins of the same denomination irrespective of their condition. Only perfect coins were accepted by the Bank at the "scale" price, and even as regards the divisionary coinage the Bank pursued a very strict policy. The only coins of this class which it would accept were the *schellingen*, and these only to the extent of 3 per cent. of any sum paid in. The inevitable consequence was, that the public began to discriminate between ordinary money and what was called "bank money," and that the premium on coins, which it was intended to prevent, was only perpetuated in another form. The more scrupulously the Bank fulfilled its task, the better the money with which it credited its customers, as compared with that in general circulation. During almost the whole time of its existence the "bank money" commanded a premium.

In the year 1790, however, unfavourable rumours began to get about concerning the administration of the Bank. Under its rules, it was expected to preserve intact all moneys entrusted to its care. The granting of loans, otherwise than on the security of bullion, was outside its province. It began to be asserted, however, that the Bank had lent large sums,

chiefly to the East India Company; and when many people thereupon applied for their money, the assertion was found to be true. On February 3rd, 1791, the Bank stopped payment, and, instead of commanding a premium, the "bank money" fell below par. From the Report of a Commission appointed to inquire into the affairs of the Bank, which Report was issued on February 5th, 1795, it appeared that the deficit amounted at that time to £770,649, and that it had previously been much greater; thus, in 1760, when the Bank ought to have had £2,500,000, it scarcely had £834,000 in its vaults! Owing to these revelations, the public lost all confidence in the Bank. Its creditors were subsequently paid off, but no one would have any more dealings with it, and by Royal Decree of December 19th, 1819, it was formally abolished.

Banks, on a similar footing to that of Amsterdam, were also established in Middelburg and Rotterdam during the time of the Republic. Neither was of much importance, however. The Rotterdam Bank, established in 1635, was never abolished; it simply became defunct. The Middelburg Bank, established in 1616, survived until July 1st, 1878, but its scope of operations had undergone a change in the interim.¹

In the later history of banking in Holland, the most important fact is the establishment of the Netherlands Bank, which commenced operations on April 15th, 1814. It is the first and only bank of issue ever established in Holland. A brief review of its career will not be out of place in a chapter like the present.²

The Bank was founded in virtue of a Royal Decree of March 25th, 1814, by which it acquired, for a period of twenty-five years, the concession to issue notes. The State

¹ The Bank of Hamburg, founded upon the same model in 1619, experienced a better fate. Its history has been written by Dr. A. SOETBEER in the *Vierteljahrsschrift für Volkswirtschaft und Culturgeschichte* (Jahrg. 1866 and 1867). In February, 1873, it was converted into an ordinary deposit bank.

² Cf. Dr. S. VISSERING's essay, *De Nederlandsche Bank gedurende haar vijftigjarig bestaan*, in *De Gids*, 1863, vol. ii. pp. 193-251; also the statistics given by Dr. H. E. MOLTZER in the *Staatkundig en Staathuishoudkundig Jaarboekje*, 1864, pp. 296-308; the *Mededeelingen betreffende de Ned. Bank*, by Dr. J. F. B. BAERT, in the 1864, 1869, 1877, and 1882 volumes of the same *Jaarboekje*; and the Annual Reports (*Jaarverslagen*) of the President of the Bank, beginning with the Report for 1864.

co-operated in the establishment of the Bank by a contribution of £83,300, an assistance which was greatly needed, for at first the public showed little confidence in the new enterprise. Of the sum of 5,000,000 florins (about £417,000) offered by the Bank, only 1,000,000 florins had been subscribed at the end of the first year, and it took until the end of the second business year of the Bank, *i.e.* until March 31st, 1816, to get the full amount. From this it will be seen that the establishment of the Bank was not greeted with much warmth by the public. Both in this, and subsequently in the matter of railway construction, the King was more far-seeing than the majority of his subjects.

It was a long time before the operations of the Bank attained anything like importance. Its note circulation amounted at the end of

	£
1814 to	111,101
1824 „	1,388,666
1834 „	1,949,968
1844 „	2,757,733

Its circulation then increased very much all at once, probably owing to the demonetisation of gold: at the end of 1854 it amounted to £7,817,260.

The development of the credit business of the Bank was even slower. The sums which it had out on discount and loan amounted at the end of

	£
1814 to	718,418
1824 „	1,555,173
1834 „	1,804,454
1844 „	3,233,706
1854 „	2,488,828

The slowness of this development was certainly in part due to the fact that the custom of discounting and granting loans was as yet but little known. “Then and for long afterwards,” says Dr. VISSERING, “the opinion still prevailed on the Amsterdam market, that the help of the Bank was really nothing but a last resource intended only for persons who were on the brink of insolvency, and no longer able, without difficulty, to obtain help from the ordinary money-lenders.”

The Government was to blame too. According to its original charter, the Bank was not allowed to lend money on foreign bonds, or to discount bills or promissory notes signed by less than three persons; nor could any loan transaction be completed without the services of a notary. It was only by degrees that the rules governing the operations of the Bank became more liberal. Under its second charter, dated August 21st, 1838, the Bank was permitted, under certain restrictions, to advance money on foreign bonds; nor did this charter impose the obligation to employ a notary in loan transactions, while it allowed the Bank to discount both bills and promissory notes bearing only two signatures. On July 9th, 1852, the Government advanced another step by removing all restrictions concerning foreign bonds, and giving permission to the Bank to invest its reserve fund "in the National Debt, mortgages, and shares of the Bank." We may note in passing that it was then for the first time that a departure was made from the strange system of secrecy previously observed by the Bank; the new charter provided that in future there should appear in the official Gazette on the first of every month a return of the Bank's note circulation, deposits, and metallic reserve.

But it was not only the public and the Government who were to blame for the slowness with which the operations of the Bank developed during the early years of its existence. The Bank itself was also to blame. It always succeeded in steering clear of one of the two faults with which the Bank of France has been charged, viz. excessive subserviency to the interests of the Government. Notwithstanding that the Government had helped to establish it, and had endowed it with considerable privileges, the Bank always asserted its independence even when the Treasury was most in need of money. The determination with which the then Administration of the Bank resisted every effort to induce it to advance money to the State cannot be too highly commended; and it was owing to that determination that the financial mismanagement of those days did not result in the notes of the Bank becoming inconvertible. The charge of lack of zeal in the service of the public, however, is one of which the Bank cannot be so easily acquitted. Under the charter of 1814, the Bank had permission to establish branch offices in

Rotterdam, Dordrecht, and other trade centres, and of this permission it made no use. Under its second charter, that of 1838, the Bank was enjoined to establish a branch at Rotterdam, an injunction which it failed to carry out. Hence it was, that, when the date for the expiration of the second charter—March 31st, 1864—drew near, many people began to entertain serious doubts as to the desirability of again conceding to the Netherlands Bank an exclusive right to issue notes. The Bank, it was true, had always maintained an adequate metallic reserve, and was an institution whose solvency could be relied on with the utmost confidence; but were not these advantages being paid for too dearly? Would the development, of which banking seemed capable in Holland, be ever realised under the restrictive system hitherto pursued? Thus there arose a *banking question* in Holland at that time. It was vigorously and ably maintained that the monopoly of the Netherlands Bank should not be renewed; that, subject to certain conditions to be fixed by law, any one should be free to issue notes. Those ideas were vehemently contested by others, who held that good legislation could remove such defects as had hitherto been revealed in Dutch banking, and that the system of centralisation presented advantages which it would be unwise to abandon except under stress of urgent necessity.

More than thirty years have passed since that controversy was waged, and any one who reads contemporary literature on the subject¹ will see that there was exaggeration on both sides. Neither of the two systems—the one-bank and the many-bank—is wholly good or wholly bad. Each has its advantages as well as its disadvantages, and it depends upon circumstances whether the former shall predominate, or the latter. A privileged bank of issue may act in such a way as to make its existence a positive evil to the country in which it operates. It may be so dependent on the Government that the convertibility of its notes will be frequently in danger; it may take so restricted

¹ An epitome of that literature has been given by Dr. J. F. B. BAERT in the *Jaarboekje* of 1864 (pp. 279-292). To the writings there mentioned, we have to add Dr. P. VERLOREN's work, entitled *De Verhouding van den Staat tot het Bankwezen* (Utrecht, 1864). Reference had already been made to this work, in which the author shows a profound knowledge of his subject. It was reviewed by myself in *De Gids* (1865), pp. 57-90.

a view of its duty to the community in general, that benefit would result from the presence of a number of other banks to compete with it. But, on the other hand, it may fulfil its task in such a manner as to satisfy all legitimate requirements; by establishing itself not only in large towns, but also in smaller and less accessible localities, it may place its services within the reach of the whole country; and by combining caution with boldness in its operations, promote a strong, but at the same time healthy, development of credit. Time and place must also be taken into account in choosing between the two systems. There can be no doubt that the system of free banks of issue has contributed towards the prosperity of the United States; it has been attended with some drawbacks, too, of course (thus, the want of a strong central bank has always been greatly felt in the United States in times of crisis), but these drawbacks are as nothing compared with the advantages that have been, and are still, derived from the system in that country. On the other hand, the adoption of the free issue system in Switzerland has not enabled banking in that country to excel in any way, from which it will be seen that development does not *necessarily* result from the application of this system. It is with this as with so many other matters coming within the domain of economic legislation: the choice lies between *laissez faire* and State intervention. Which are we to choose? Sometimes the one, sometimes the other. The national character, the number of the population, the history of a people have to be considered. We must weigh the probable advantages against the probable disadvantages. In many cases there can be no doubt as to what our choice should be. Nobody will dispute that the currency should be regulated by the State, or declare that the postal system should pass into private hands. In most cases, however, it is not so easy to determine what the choice should be, and one of these cases is that which concerns the regulation of banking. So far, Holland has adhered to the system of restriction, and she appears to be even less disposed now than formerly to abandon it. It would not be desirable, however, to shut the door irrevocably against competition.

Nor has the Dutch Legislature failed to bear this in mind;

the law of December 22nd, 1863, "enacting provisions concerning the Netherlands Bank," while declaring that institution to "have the right for a period of twenty-five years" to operate as a bank of issue, at the same time left it possible for the same rights to be conceded to others as well. The first part of article 1 of the law provides that "No bank of issue shall be established, and no foreign bank of issue shall cause its notes to be circulated in this country, otherwise than in virtue of a special law, and subject to the conditions laid down in such law." It will be seen that this measure corresponds approximately to that introduced in Germany on March 14th, 1875, only the Dutch law shows a much stronger determination on the part of the Legislature not to be tied to the system of centralisation. They went very far in giving expression to this determination at first; so far, indeed, as not to require the Netherlands Bank to make any payment whatever to the State, the sole duty imposed upon the Bank being that of "undertaking *gratis* the functions of agent of the Government Exchequer at Amsterdam," the State reserving to itself the right to require the Bank "also to undertake *gratis* the functions of Government banker in Rotterdam and in all places in which the Bank shall have established branches"; finally, it was to be a matter which might be determined by a subsequent law, "whether, and if so, subject to what conditions, the Bank should be required to undertake the whole of the functions of the Government Exchequer within the realm." Subsequently, in virtue of an agreement with the Government, sanctioned by a law dated July 24th, 1871, and in consideration of an annual payment of 100,000 florins, the Bank was relieved of the last-named liability, and these 100,000 florins per annum represent the sole payment which the Bank made during the period 1864-89 in return for the privileges conceded to it. It is now no longer disputed by any one that this generosity was a mistake, and that the Government would have acted wisely if, from the first, it had stipulated for a share in the profits of the Bank. But in failing to do so, it was merely pushing the application of a sound principle beyond due limits. Its desire was that the monopoly of the Bank should only be a virtual, not a legal monopoly; that the State should remain perfectly free to permit the

establishment of other banks of issue, if at any time it should think fit to do so.

From the foregoing the reader will have obtained a sufficiently clear idea of the general spirit of the law of 1863, the first Dutch Bank Law, for in 1814, as well as in 1838 and 1852, the matter was regulated by Royal Decree and not by a law. We now propose to describe the remaining provisions of this law, and the manner in which they have been administered.

One of the most important of these is contained in article 5, whereby the Bank is required to establish a branch bank at Rotterdam, and at least one agency in each province, besides appointing correspondents "according to the existing needs." How has the Bank fulfilled these requirements? In addition to the branch bank at Rotterdam, there are now 18 agencies and sub-agencies;¹ 48 first class, 14 second class, and 10 third class correspondents' offices. The functions of a third class correspondent's office are confined to collecting bills of exchange and other documents; but at all the other offices mentioned—82, including the head office—bills are discounted, loans granted, and notes cashed, issued for specie, or exchanged for other notes.

Under article 7 the credit operations of the Bank are restricted to the discounting of commercial paper, and to granting loans on bonds and goods. It is forbidden to grant loans on mortgage, on security of ships, or on simple note of hand; or to purchase bonds or goods; only its reserve fund may be invested in the Dutch National Debt and in mortgage-bank bonds. Thus the scope of the Bank's operations is greatly restricted. In imposing these restrictions the Legislature was influenced by the consideration that a bank of issue ought not to invest its resources for too long a period, and that it should be in a position to effect a considerable reduction very quickly in the amount which it has out on credit, in the event of a call being made on it for notes or deposits. Discounts and short term loans on the security of goods and public funds are in every way calculated to enable a bank to fulfil this requirement. If, for example, a bank has £9,000,000 out in various discounts and loans, each of which falls due at some

¹ So far as concerns the public, there is no difference between an agency and a sub-agency.

time within a period of ninety days, it is bound to recover at least £100,000 per day on an average in respect to these credits; and if the old credits be replaced by new ones to the extent of one-half only, then the uncovered circulation of the bank will be reduced at the rate of at least £50,000 per diem on an average. The longer the terms for which the credits are granted, the smaller will be the amount returned to the bank per day; the shorter those terms, the easier will it be for the bank to replenish its metallic reserve within a short space of time.

But the object which the Legislature had in view could have been attained just the same if the Bank had been allowed a wider scope of operations. It would have been quite safe to allow it to invest a portion of its capital, besides its reserve, in public funds. For the capital of a bank achieves its main purpose—that of protecting the creditors of the bank from detriment arising out of losses sustained by the bank—just as well when invested in this way, as it does when not invested at all, or when put out in discounts and loans. And there is another thing which it would have been safe, not to say advantageous, to allow the Bank to do. Some banks of issue are authorised and accustomed to arrange for a portion of their bills to consist of paper drawn on firms established abroad. Regarded as an investment, such paper is preferable to ordinary bills, for the banks can realise on them at any time. No harm whatever could have resulted from allowing the Netherlands Bank to purchase foreign bills of exchange.

This was recognised when the charter of this Bank was renewed in 1888 (by a law dated August 7th of that year). The capital was then raised to 20,000,000 florins (about £1,667,000); one-fifth of that sum the Bank was allowed to invest in certain kinds of bonds, and it was at the same time accorded permission to buy and sell foreign bills.

So much for the credit operations of the Bank. Let us now see what kind of rules were prescribed with regard to its metallic reserve; the simple and, at the same time, effective manner in which this matter was regulated in 1863 is well worth our attention.¹

¹ In an article entitled *De regeling van de bankbiljetten-emissie hier te lande*, contained in the *Verslagen en Mededeelingen der Kon. Akademie van Wetenschappen*.

In the first place, it is to be observed that the law does not itself prescribe the amount of the metallic reserve, but only provides that there shall be a Royal Decree (to be issued upon the proposal of the Directors of the Bank) determining the amount of that reserve. Article 16 of the law provides that this Decree shall be "amended from time to time so far as shall be necessary." Thus, in the event of circumstances rendering such a course desirable, the existing rules concerning the metallic reserve can be altered within a comparatively short space of time. But—and this is the second point to be observed—the Government cannot regulate the metallic reserve according to their own discretion; the principle is laid down that "the proportion in which the sum total of the bank notes, bank bills, and deposits shall be covered by bullion or specie, shall be determined by Royal Decree." Thus a *proportion* has to be prescribed as between total cash liabilities, *i.e.* total of note circulation, deposits, and current bank bills, on the one hand, and metallic reserve on the other. A proportion, be it observed, and not what the Germans call *Contingentirung*, whether direct or indirect. And it is not the note circulation alone, but the whole of the cash liabilities of the Bank that have to be covered by a metallic reserve.

By Royal Decree of April 16th, 1864, it was determined that the proportion in question should be one of two-fifths, or 40 per cent. Knowing this, we can easily ascertain the position of the Netherlands Bank at any given time. If, for instance, the note circulation amounts to £19,400,000, the current bank bills to £60,000, and the deposits to £540,000, making a total of £20,000,000, then the metallic reserve should amount to £8,000,000. Should it actually amount to, say, £11,000,000, then there is a "surplus reserve" of £3,000,000.

Since the renewal of the charter of the Bank (by law of August 7th, 1888) no further rules have been prescribed in the matter of the metallic reserve. Under this charter,

schappen (*Afd. Letterkunde, 3de Reeks, Deel XII, bl. 225-261*), Dr. N. P. VAN DEN BERG furnishes exhaustive details regarding earlier methods of regulating this question. In these earlier methods we find all those mistakes being made with which we are familiar, such as fixing a maximum amount for the uncovered note issue, and requiring a metallic reserve to be held against this note issue only, instead of against the whole of the cash liabilities of the Bank.

which dates from April 1st, 1889, it is provided "that the term for which the Bank . . . shall be entitled to operate as a bank of issue" be extended to March 31st, 1904, after which it shall be "understood to be renewed for further successive periods of ten years," provided that, at least two years before the expiration of any such term, "notification of unwillingness in respect to further renewal shall not have been made" on the part either of the Government or of the Bank. But although no further rules have been prescribed with respect to the metallic reserve, the law itself contains some important provisions besides those relating to the purchase of bonds and foreign bills of exchange, of which mention has already been made. In the first place, a large share of the profits of the Bank is apportioned to the State. The first 5 per cent. on capital is taken by the Bank. Since the capital amounts to 20,000,000 florins, this represents a sum of 1,000,000 florins, or about £83,300. Of the balance, one-tenth goes to the reserve fund, until that fund has reached the sum of 5,000,000 florins. Of what is left, half accrues to the Bank and half to the State, until a point has been reached when the total share taken by the Bank amounts to 7 per cent. of the capital (irrespective of the sum paid into the reserve fund). *Two-thirds* of the balance then left are taken by the State, and *one-third* is taken by the Bank. Thus, supposing the reserve fund to have reached its full statutory amount, and the profits on the year's operations to be 9 per cent., then the State would take 2 per cent. or 400,000 florins; with a 10 per cent. profit, it would take $2\frac{2}{3}$ per cent., while with a 12 per cent. profit, 4 per cent. or 800,000 florins would accrue to the State.¹

Secondly, the functions of the Bank in the service of the

¹ The amount of the Bank's profits which actually accrued to the State in the undermentioned years has been as follows :—

Years (ended March 31st).	Amounts. £
1890	77,815
1891	127,524
1892	102,166
1893	62,870
1894	112,310
1895	41,367
1896	73,898 .

Government are more clearly defined. The Bank is obliged, when requested, to grant advances up to a maximum of 5,000,000 florins to the Government, at the rate of interest usually paid for loans, and upon the deposit of adequate security in the shape of treasury notes. This obligation ceases when, and for so long as, the "Surplus Reserve" at the Bank falls short of 10,000,000 florins. It holds good only in so far as the loans to the Government would not have the effect of reducing the Surplus Reserve below that limit.

There is also a provision concerning the purchase of foreign bills of exchange, which is worth noting. In order to prevent the Bank from engaging too extensively in this class of business, the law provides that the total amount of money invested in such paper shall never remain in excess of the amount of the Surplus Reserve of the Bank for more than fourteen consecutive days. The result of this is, that as soon as that Reserve becomes reduced owing to the exportation of gold or silver, or to increased discount and loan operations, the Bank is obliged to realise on a portion of its foreign bills, if their sum should happen to have reached the maximum. But the practical effect achieved automatically by this provision is, that the sum-total of the foreign bills always falls short of that maximum, and that the ability of the Bank to grant credit freely in Holland is in no way impaired by the purchase of such bills.

The Netherlands Bank is not the only corporation by which banking business is carried on in Holland, although it is the only one that issues notes. There are also many institutions, persons, and firms engaged in banking of one kind or another. Frequently, but more especially in country places, uninvested money is placed in the hands of solicitors, who obtain interest on it by lending it out to persons in their immediate circle. Such money also finds its way to the Amsterdam Exchange, where, as already mentioned, it gets invested through the agency of brokers and similar persons in loans on the security of bonds, mostly Government and other public stocks. Loans of this kind are said to be "on prolongation," because, unless otherwise

agreed, they are "prolonged" or renewed from month to month, on payment of the interest due. The value of the security must always be kept at least at £110 for every £100 borrowed. It would be difficult to estimate the amount of money invested in loans of this kind at any given time, but the sum must be a considerable one. A large part of the deposits of banking institutions, too, are so invested, as are also some of the moneys of which bankers have occasionally to take charge by reason, for instance, of their relations with people abroad.

In order to afford the reader at least some notion of private banking as conducted in Holland, we will first discuss the Banks of Deposit.

According to the strict letter of the Dutch Commercial Code, the business of a banker (*kassier*) consists solely in taking charge of or receiving money belonging to persons or institutions, and in disbursing the same on behalf of, or returning it to, the said persons or institutions. So far as we are aware, however, there now remains in Holland only one Association—the *Associatie Cassa* at Amsterdam—which does banker's business on these lines. All the loans advanced by this corporation come out of its own capital, and out of such moneys as it has received for the special purpose of being put out at interest. None of the other banks are conducted on this plan. Of the funds entrusted to their care, they only keep in hand such a sum as they reckon to be sufficient to enable them to meet the payments which fall due from day to day, and they invest the remaining portion on terms under which they are able to convert it into money, or obtain money on it at a moment's notice. For the fact that they are able to do so without difficulty, they are indebted to the resources of the Netherlands Bank, and to the facilities provided by that institution in the matter of obtaining credit on good security. In short, the Dutch banks of deposit have gradually developed into the English type. Their scope is sometimes greatly restricted by their rules, as, for instance, when these forbid them to advance money on real estate, to lend on simple note of hand, or to purchase bonds on their own account (except to a very limited amount). But where such an institution is not a limited company, so that

its operations are not hampered by any rules, it can use its available funds in whatsoever way it thinks best. The Rotterdam bankers lend very largely on simple note of hand, the occasional losses which they suffer in consequence being amply compensated for by the profits realised.

ADAM SMITH has said that division of labour increases with the extent of the market to which it is applied. This is not absolutely true, seeing that in a city like Paris we find shops where the utmost possible variety of goods can be obtained, just as we do in small villages; but as regards banking, it is true up to a certain point. For instance, nowhere outside Amsterdam and Rotterdam are genuine types of the bank of deposit to be found such as we have been describing. In those two cities the banker is the stockbroker, and sometimes also the Credit Society or its agent.

The Dutch *Crediet-vereenigingen* or Credit Societies are totally different institutions from the German *Credit-vereine*; they are not exclusively, or even primarily, intended as institutions for satisfying demand for capital on the part of small borrowers; their business is rather on a large scale, and they do not recognise the collective liability of the whole of the members. The liability of each member is limited to the amount of his share, and that amount also represents the maximum loan which he can obtain from the Society, whether on personal surety, on the security of property, or on simple note of hand. The sources on which the Society draws for these loans are various. In the first place, it has its own capital, there being non-borrowing members (ordinary shareholders) in every Society; moreover, each member who wishes to rank as a borrowing member must pay up a certain percentage of his share. Then, borrowers are required to give the Society promissory notes at three or three and a half months, which it can discount at the Bank or elsewhere, and this constitutes a second source on which to draw. Lastly, being a bank of deposit, it has its current account balances and deposits to draw on. The Dutch Credit Societies are spreading considerably, partly because they are establishing agencies. The official Statistical Year-book mentions twelve of them, with total deposits of £1,383,000, and outstand-

ing loans to the amount of £2,117,000 on December 31st, 1894.

There is another class of banking institution which, for want of a better term, we must call "General Banks." Their characteristic feature consists in the wideness of their range of operations. They grant loans on bills of lading, deal in bonds, bills of exchange, and coupons, undertake financial commissions; in fact, on a greater or lesser scale they do every kind of business done by banks of deposit. Some of these institutions are also banks in the ordinary sense.

If we had set ourselves the task of passing in review the whole range of Dutch banking, we should have to refer at some length to the colonial banks, whose main business consists in granting loans upon enterprises in the colonies and dealing in bills between the latter and the mother country; to savings banks, whose functions are sufficiently well known; and to mortgage banks, which, by issuing what are called mortgage bonds, procure the means wherewith to grant credit for long terms on the security of real estate. But here we are discussing banking only in so far as it is connected with economy in the use of money in internal commerce; and savings banks can hardly be said to contribute towards such economy. The system of banks of deposit is not so strongly developed in Holland as in England and Scotland. It is extending, but as yet the custom of paying by cheque has made but little headway in Holland. Hence her large bank note circulation, amounting, in the period 1890-96, to over £16,750,000 per annum on an average; this works out to about £3:8:4 per head of the population, a figure attained in no other country in the world except France, where of late the note circulation has risen to £3:14:5 per head. In one sense Holland has reason to congratulate herself upon the fact, for it shows that the notes of the Bank have found their way among a wide circle of persons. But it also proves that the bank note has not been superseded in Holland to the same extent as elsewhere by other instruments of credit, which are more convenient, and which experience has shown to admit of still greater economy being exercised in the use of metallic money.

So far as concerns the use of coined money, four stages can be discerned in the growth of nations. In the primitive stage, coined money is unknown; all commerce consists of what is called barter, or else substitutes for money are employed. At the second stage money comes into use, an advance only rendered possible by increase of circulating capital; for a relatively large amount of capital is needed for the employment of coined money. The third stage is reached with the introduction of credit paper. Lastly, a fourth stage is arrived at when the people have learnt to effect the bulk of their payments by means of book transfers, and money has begun to fulfil a purely imaginary function in the majority of cases. By then the nation has, as it were, reverted to the conditions of the primitive stage. Its commerce—or at any rate the bulk of it—consists once more of barter, but with this important difference, that whereas in the primitive barter money did not figure at all, it does figure in the modern barter, where it serves as a measure of value: the people do not pay each other money, but they reckon in money. Nor is specie altogether superseded. It remains in use for the majority of small payments, and serves the purpose of reserves to be held by banks against their liabilities.

To return to the Netherlands Bank, we desire to mention one class of its operations which, though not a source of appreciable revenue to that institution, is nevertheless very helpful to trade, and greatly simplifies payment between persons residing in different localities. We are alluding to the issue of bank bills, which, whatever the sum inscribed on them, are obtainable for that sum plus a poundage of 30 cents (say 6*d.*) at any Bank office. Sums amounting to about £21,000,000 are remitted annually in this way between one locality and another. And there is another means, no less extensively used, whereby the Bank simplifies such remittances. Any person who has a current account with the Bank can have any sum he pleases transferred from his account to that of any other person having such an account with the Bank, no charge being made for the transfer; and any person can pay sums into any Bank office for the purpose of having them credited to the current accounts of persons residing elsewhere. Transfers and payments effected

in this way amount to between £11,700,000 and £12,500,000 per annum. The total amount in respect to which payments were adjusted between individuals or institutions by means of bank bills, transfers, and payments into account, amounted to £34,083,000 in the business year 1895-96.¹

§ 9

Banking in Switzerland and the United States

In conclusion, there are a few words to be said concerning two countries—Switzerland and the United States—where it is open to any one, who complies with certain requirements, to open a bank of issue.

Up till the year 1881, Switzerland had no National Bank Law, although the law of 1874, determining the Federal Constitution, contained a clause² under which the framing of such a law was expressly permitted, provided that it did not grant any monopoly, or confer the status of legal tender upon any bank note. It was left to the Cantons to deal with the matter, and they were not uniform in their manner of exercising this liberty. Thus in one Canton no relations whatever existed between the Government and the Bank; in another the former guaranteed the notes of the latter; some of the Cantons even had State Banks. Out of twenty-six banks of issue which existed in Switzerland in 1881, and of which the oldest (that of Berne) was not established until 1834, no fewer than eleven were administered for the account of Governments of Cantons. Until recent years, the bank note circulation of Switzerland has been insignificant; it is not so very long (1871) since it only amounted to £993,000, or 7s. 5d. per head of the population. In 1873 it averaged £2,312,000; in 1875, £3,091,600; and in 1883, £4,089,120, or £1 : 8 : 3 per head of the population. Even then it was small, seeing that in Holland it amounted in the same year to nearly £4 per head of the population. It has gone on increasing, however, and now (May 1896) between £7,200,000 and £7,600,000 in bank notes are in circulation in Switzerland.

¹ For further statistical details, see Dutch Statistical Year-Book (*Jaarcijfers*).

² Article 39.

The entire absence of mutual relations between the various banks was a great obstacle to the development of banking in Switzerland in the past. The bank notes of one Canton were not accepted as payment in the neighbouring Cantons. This condition of things was remedied by the *Concordat*, which took effect from September 1st, 1876, whereby the signatory banks undertook to cash each other's paper, "in so far as their resources shall permit, and in so far as the bank by which the notes have been issued shall continue to fulfil its obligations." The *Concordat* continued in operation until after the introduction of the law of 1881. It was then renewed.

Under the law of 1881, all banks of issue in Switzerland, whether existing at the time or established subsequently to the date of its coming into operation, are subjected to a series of regulations.

A bank that issues notes must possess a capital of not less than £20,000. It must cash its own notes within two days of their being presented; it must undertake to cash those of other banks free of charge within three days, and to accept them as payment so long as the institutions by which they have been issued continue to fulfil their obligations.

The rules relating to the metallic reserve are as follows. A metallic reserve representing 40 per cent. of the total note circulation must be constantly kept on hand, and must not be utilised in any of the other operations of the bank, its sole purpose being to ensure the convertibility of the notes. The remaining 60 per cent. must consist either of bonds approved of by the Federal Council and deposited with a Cantonal Government office, or of bills of exchange bearing at least two signatures and maturing within four months at the outside. These bills, like the metallic reserve, fulfil the purpose of a "special security" for the holders of the notes. The balance of 60 per cent. may, however, be guaranteed by the Government of the Canton in which the head office of the bank is situated, and in that case the provision relative to the bonds and bills of exchange becomes inoperative. There is one rule, however, which applies to all banks without distinction, and that is that the amount of the note circulation must never exceed twice the paid-up and still existing capital of the bank.

As regards the choice of their operations, the banks are subject to no restriction whatever, provided their uncovered circulation be secured by the deposit of bonds or the guarantee of a Cantonal Government. But if their uncovered circulation be secured by bills of exchange only, then various operations are prohibited to them. In such a case they are not allowed to lend on simple note of hand, to deal in bonds for themselves or for others on terms of future delivery, to own land except for their business premises, to participate in industrial or commercial business other than commerce in precious metals; nor are they permitted to establish joint-stock companies or to place the shares or bonds of such companies in the market, if in so doing they should incur liabilities towards persons or bodies other than Government and Municipal Administrations within the territory of the Swiss Confederation. Finally, they are not allowed to engage in insurance business or become shareholders in concerns doing any of the classes of business which they themselves are prohibited from carrying on.

In order to ensure faithful observance of all the provisions of the law, the banks are required to make weekly, monthly, and annual returns, according to prescribed forms, to the Federal Council, and to allow their accounts to be audited and their reserves and bills to be verified by persons authorised in that behalf by the said Council. For the purpose of defraying the cost of inspection, the banks are required to pay the Federal Government an annual tax of 0·1 per cent. on their note circulation; and if they have deposited bonds, a tax of 0·1 per cent. on the amount of such bonds to the Government of the Canton in whose custody they lie. The Cantons, however, are not allowed to subject the banks to any taxation exceeding 0·6 per cent. of their note circulation.

Such is the system of regulation as applied to the banks of Switzerland in 1881. It cannot be said to call for admiration. If ever a bank of issue should happen to fail in Switzerland, the position of its depositors will not be an enviable one, for the holders of notes will have a prior claim upon the metallic reserve and upon the bills of exchange or deposited bonds, so that the other creditors will have to be content with whatever remains. When the system was seen in operation—and it was faulty in other respects besides that just men-

tioned¹—it gave no satisfaction; on the contrary, the desire that Switzerland should possess a central credit institution as efficient as those existing in other countries, grew stronger than ever. The fulfilment of this reasonable desire was barred by Article 39 of the Law of the Constitution, and an address signed by 80,000 persons was presented to the Federal Council urging that that article be amended. The Federal Council was at first disinclined to take action in the matter, but subsequently acceded to the terms of the address and put forward a proposal for the amendment in question. The proposal was agreed to by the National Council and the Council of States, and on October 18th, 1891, it became law in virtue of a National *Referendum*. As amended, the law provides that the right to issue notes belongs exclusively to the Confederation, and that the Confederation may permit that right to be exercised either through a State Bank administered by a special Department of the Government, or through a Central Bank administered with the participation and under the supervision of the Confederation.²

The words, "with the participation," are very significant. Since 1814 the principle has been maintained in Holland (and neither the law of December 22nd, 1863, nor that of August 7th, 1883, involves the slightest departure from it) that the State must abstain scrupulously from "participation" in the administration of the Bank. In this policy of abstention, the Dutch have seen (and rightly, it seems to us) a safeguard against the mingling of politics with banking affairs, against a system of bank administration not exclusively devoted to the furtherance of those interests for which the Bank exists. It is not by mere accident that the Bank enjoys the position of being absolutely independent, though subject to the supervision of, the Government; the Legislature itself deemed such independence to be essentially necessary

¹ Cf. G. M. BOISSEVAIN's article, "De Circulatiebanken in Zwitserland," published in *De Economist* of 1888, pp. 19-37.

² "Das Recht zur Ausgabe von Banknoten und anderen gleichartigen Geldzeichen steht ausschliesslich dem Bunde zu."

"Der Bund kann das ausschliessliche Recht zur Ausgabe von Banknoten durch eine unter gesonderter Verwaltung stehende Staatsbank ausüben oder es, vorbehaltlich des Rückkaufrechts, einer zu errichtenden zentralen Aktienbank übertragen, die unter seiner Mitwirkung und Aufsicht verwaltet wird."

for the Bank. The President and the Secretary are the only officers nominated by the Government, the five other directors being elected by the shareholders; nor does the President or the Secretary receive any instructions, either general or particular, from the Government. In Switzerland, as we have seen, a totally different principle obtains, and we must bear this in mind when forming our opinion of the scheme of bank legislation subsequently introduced by the Government.

This scheme contemplates the establishment of a State Bank, and in this the Government has decided wisely under the circumstances. Of the two forms of bank, between which it had to choose in order to give effect to the amended Article 39 of the Law of the Constitution, this one was certainly the less open to objection. Above all things, there must be harmony in the administration of a central credit institution: and how is it to be obtained where the Board of Directors is composed, on the one hand, of private individuals nominated by the shareholders, and having a perfectly free hand within the limits of the Bank byelaws; and on the other hand, of representatives of the Government who are furnished with instructions (some open, others confidential), and whose hands are thus tied? Who will form the majority in such a Board? The shareholders' representatives?—then the participation of the Government will not amount to much. The officials?—then the responsibility will rest with them. Switzerland would certainly have done better had she adopted the Dutch principle, which is also that adopted by France and Great Britain, and which has withstood many a test with brilliant success. But let it be adopted in its entirety or not at all. A State Bank wholly directed by Government officials will be a more independent body than it would ever be possible for a private bank partially directed by the State to be.

The Swiss nation, as a whole, is not quite convinced of this; and although the National Council and the Council of States have given their adhesion to the principle of the Government scheme, it is still uncertain whether it will survive the ordeal of the national *Referendum*.¹

¹ Details concerning the contest waged over this question are to be found in an article by A. REGELY, published in vol. lxxv. of the *Jahrbücher für National-*

We now come to the United States. Prior to 1863 the regulation of banking was left entirely in the hands of the various States of the Union; in that year the Federal Legislature concerned itself with the question for the first time. Not that the States have been curtailed in their liberty of enacting bank legislation; but the Federal Legislature has created a new class of banks, called National Banks, and has accorded them special privileges. Since then, one has had to distinguish between two classes of banks, the State Banks and the National Banks. The former are not Government institutions, as their name might suggest, but banks which have not adapted themselves to the provisions of the Federal law.

The year 1863 was not the first in which privileges were accorded to a bank by the Federal Government; but whereas before they had been accorded to one particular institution, now they can be secured by any bank. The one institution referred to was the United States Bank, established in 1791. The charter of that Bank, after expiring in 1836, was renewed by the State of Pennsylvania, but not long afterwards (in 1841) the Bank failed and its shareholders lost heavily. It never had a monopoly, but its notes were accepted in all the Federal Treasuries. Notwithstanding this privilege, the note circulation of the Bank always remained small; in 1836 it was only \$23,000,000. The deposits, too, were small, and reached their maximum in 1832 with \$22,700,000, a figure which had shrunk to \$5,000,000 by 1836.¹ Opinions differ concerning the manner in which the United States Bank was managed during the time in which it held the Federal charter; it has received much praise, and it has also incurred much censure. But its business was not large enough to make it possible for the Bank to exert a very powerful influence either for good or for evil.

The law of 1863 was more important. There had long

ökonomie und Statistik (pp. 418-445), and in the Swiss Government publication entitled, *Art. 39 der Bundesverfassung: Materialien zur Entscheidung der Frage Staatsbank oder Privatbank*. See also more especially the publication entitled, *Protokoll der Kommission des Nationalrates betreffend Bundesbankgesetz*, Bern, 1895. [In February 1897, the scheme was rejected by a *Referendum*. There were 192,551 Ayes and 247,588 Noes.—A. A. W.]

¹ See *Bulletin de Statistique* (1884), vol. i. p. 731, where figures are given covering the period 1817-40.

been need for improvement in the banking system, for things had generally been in a very unsatisfactory condition. A sum amounting on an average to 5 per cent. of the monetary circulation was lost to the public annually in consequence of the bank having stopped payment.¹ In 1841, 55 banks, representing one-fifth of the total bank capital of the United States, failed. In 1836, in the State of Ohio, the paper of 36 banks became worthless, while 18 other banks were in a state of liquidation. In the same year, 51 out of a total of 94 banks in the State of Indiana stopped payment, and their notes were negotiated at a loss of from 25 to 75 per cent. In fact, it had come about at one time that every bank in the United States had suspended specie payments. Not all the States of the Union, it is true, were in equal need of bank reform. New York State, for instance, had had a very good bank law since 1838. It was subsequently improved, and its provisions were adopted by eleven States.² But banking throughout the whole of the States of the Union suffered from one drawback, which the Federal Government alone could remedy, and that was, that none of the existing bank paper was current all over the Union.

The law of 1863, including its amendments, may be summarised as follows. Every National Bank must possess a paid-up capital of from \$100,000 to \$200,000, according to the population of the locality in which it is established. The amount for which it may issue notes depends upon the amount of its capital. Thus, if it possesses \$500,000 or less, it may issue notes up to 90 per cent., and if it possesses more than \$3,000,000 it may issue them up to 60 per cent. of its capital. The notes are supplied to it by the Federal Government, but only upon the bank depositing \$100 in United States bonds for every \$90 dollars in notes. The notes, moreover, are supplied subject to the condition that the bonds deposited (which remain the property of the bank) shall never be con-

¹ See Mr. R. W. BARNETT's interesting article on "The National Banks of the United States of America," in the *Journal of the Institute of Bankers* (vol. iii. pp. 381-414), and the equally well-written article in the *Bulletin de Statistique* of 1884 (vol. i. pp. 707-736), of which mention has already been made.

² An abstract of this law will be found in an article on "Banking in the United States," written by M. PHILIPPOVITCH for the *Handwörterbuch der Staatswissenschaften*, Theil ii. p. 170.

sidered to be worth more than par, no matter what the price at which they are quoted in the market. In the event of a National Bank failing, the holders of its notes can appeal to the Government, which is then empowered to sell the bonds on behalf of the bank, and to employ the proceeds in redeeming the notes.

Unlike any other enactment dealing with the same subject, the United States Bank Law of 1863 requires no metallic reserve to be held against the note circulation. Only the deposits have to be so secured, and the amount of the metallic reserve required to be held against deposits is not the same for all places. The law specifies eighteen cities—which it calls “Redemption Cities”—where the reserve must amount to 25 per cent.; in all other places it need only amount to 15 per cent., and a portion of it may even be deposited with the banks of the “Redemption Cities.” It must consist of legal tender, that is to say, either specie or Government notes.

As regards their scope of operations, the National Banks are subject to a few restrictions under the law. They must not own real estate, advance money on mortgage, or lend to any one person a sum exceeding 10 per cent. of their own capital. They are, moreover, subject to the supervision of a Federal officer, styled the “Comptroller of the Currency,” who may require them to furnish him with any information which he deems necessary.

As a set-off to these restrictions and obligations, the “National Banks” enjoy the following advantages. In the first place, they are taxed at a much lower rate than the other banks; they pay 1 per cent. per annum on their note circulation, as against 10 per cent. payable by the “State Banks” under a law of March 5th, 1865. Again, the notes of the “National Banks” are accepted by the public Treasuries in discharge of all payments (other than import duties) accruing to the Federal Government; while the latter is empowered to effect all its payments (other than in the service of the National Debt) with such notes. It also guarantees their convertibility, and for this purpose receives in deposit from the banks a sum amounting to 5 per cent. of their circulation.

One result of this law was, that after a while the “National Banks” were the only banks that continued to

issue notes. Not that the State Banks disappeared; in 1894 there were still 4,359 of them in existence; but they were all deposit banks. The profits derived by the "National Banks" from the issue of notes have shrunk very much in recent times, owing to the Government having succeeded in borrowing at a lower rate of interest than before, and redeeming a large amount of old debt. In October 1894, the guarantee funds deposited with the Government by banks in accordance with law, amounted to \$199,000,000; of this sum, \$155,000,000 consisted of 4 per cent. bonds. Bearing in mind, moreover, the 1 per cent. tax on circulation—formerly the banks were also taxed $\frac{1}{2}$ per cent. per annum on their deposits and share capital, but they were relieved from this by a law dated March 3rd, 1883—we shall understand that these institutions can no longer derive much profit from the issue of notes, and that their advantage rather lies in the direction of developing their current account business. The following figures show this:—

Year.	Number of National Banks.	Paid-up Share Capital.	Notes Issued.	Deposits.
		£	£	£
1864	508	18,083,000	9,438,000	25,458,000
1874	2,027	103,292,000	65,771,000	131,125,000
1884	2,664	109,188,000	58,417,000	208,750,000
1894	3,755	139,355,000	35,896,000	362,938,000

The bank note is diminishing in importance. The "National," as well as the other banks, are acquiring more and more the character of deposit banks. The feature which distinguishes the "National" from the "State" bank is becoming less prominent from day to day. The cheque system is advancing steadily. There are at present 62 clearing houses in the United States, where some £12,000,000,000 are cleared annually. In 1894, an inquiry was undertaken with the object of ascertaining how far the cheque had come into use as a medium of payment in retail transactions. The data resulting from this inquiry were incomplete, but they sufficed to show that drafts on bankers occupy a very important place among the media of payment in use even in retail trading transactions.¹

¹ See *Annual Report of the Comptroller of the Currency* (Washington, 1894), p. 17.

Not counting the deposits in the 1,024 savings banks (about £364,000,000 belonging to 4,777,689 depositors), no less than £618,125,000 were deposited in banks of various kinds in the United States in 1894, so far as could be ascertained.

Notwithstanding all that may, with truth, be said in its favour, banking in the United States is not in an altogether satisfactory condition. The note issues are adequately guaranteed, it is true, but the other liabilities of the banks are not. For some years after the introduction of the law of 1863, there was an impression that at least the National Banks were being properly managed, and that there would be no recurrence of past calamities. Gradually, however, this impression waned. Between 1863 and 1874, only 37 of these banks became insolvent; but for the period 1875-84 the number rose to 65, and for the period 1885-94 to 158. This makes a total of 260, to which must be added 975 banks that went into liquidation. A large number of the bank failures were due more especially to the events of 1893, of which the state of the currency was not the sole cause. During the first half of that year, the deposits of the "National Banks" fell by no less than £42,000,000, and several of these banks got into difficulties. Credit in the United States cannot as yet be regarded as having achieved a reputation for stability, and there are times when the need for a central credit institution in each of its trading centres is sorely felt by that country. Nor are the National banking laws of the United States altogether satisfactory; agitation for their improvement is proceeding in various quarters.¹ So far, all efforts to bring about the desired improvement have been unsuccessful, and it will probably be some time before they are crowned with success, seeing that in the United States all questions pertaining to the currency give rise to so much controversy.²

With this we conclude our review of the banking arrange-

¹ Cf. *Report of the Committee on Banking and Currency, together with Hearings thereof, on Bill H.R. 8149* (Washington, 1894). The Bill in question was one introduced into the House of Representatives in 1894 "to amend the laws relative to National Banking."

² By the Act of March 14th, 1900, several modifications have been introduced into the law regarding the issue of bank notes. See notes in Appendix to present translation, p. 604.—A. A. W.

ments of the principal countries. It will be seen that only the main features have been indicated, and only those countries dealt with in which, for one reason or another, the banking arrangements are deserving of special notice. We now propose to treat of the bill of exchange, a species of credit instrument which renders important services, more especially in international trade; and of foreign exchanges, a subject which bears a close relation to that of money.

CHAPTER III

BILLS OF EXCHANGE AND FOREIGN EXCHANGES

§ 1

The Purpose of the Bill of Exchange

IN a commercial nation there are always certain persons who have to make payments abroad. They have purchased foreign goods or securities; they owe interest on capital, which they have borrowed abroad, or the time has come for repaying such capital; the rate of interest is higher abroad than at home, and they wish to take advantage of the fact; or lastly, they have collected money for some person or persons residing abroad. Every one knows, in fact, that there may be a variety of reasons why any one who has dealings with a foreign country should have occasion to remit money.

But in a commercial nation there are also certain people whose case is exactly the reverse of that of the persons just referred to. They have sent goods or securities abroad; they possess coupons payable abroad; they have had a credit opened to them abroad and wish to avail themselves of it, or they have invested some capital abroad and wish to recover it.

What is more natural than that these two groups of persons should effect a mutual arrangement? It is to the interest of both that they should. If those who are entitled to draw money from abroad transfer their claims to those who wish to send money abroad, each will save the other expense and trouble by doing so.

The bill of exchange is the instrument by means of which such transfers are effected. It does not transfer any capital,

but it places capital at the disposal of others. The bill of exchange is a document directing one person to pay a sum of money to another person or to the order of (*i.e.* to some third person designated by) the latter. The person who issues such a direction is said to draw a bill, and is called the "drawer"; the person directed to make the payment is known as the "drawee," and when (by writing his name across the face of the bill) he has pledged himself to make the payment, as the "acceptor" of the bill. The act by which one person transfers to another his claim in respect to a bill is termed "endorsement," because it consists in writing on the back of the bill. Again, for the drawee, the bill constitutes a "draft," and for the person to whom it is sent, a "remittance."

The economic importance of the bill of exchange is closely related to its legal character. According to the laws of all countries, the person who affixes his signature to a bill of exchange, no matter in what capacity, becomes liable to any lawful holder of the bill for the full payment of the sum inscribed thereon. Such is the general rule, though exceptions are admitted under the laws of certain countries. When a person who has bought a bill and sent the same by way of remittance gets the bill returned to him unpaid, he is entitled to claim payment of the money from each person whose name appears on the bill. Thus the bill of exchange is a medium of payment. In international trade, people pay each other with bills of exchange, just as in the home trade they do so with coin, bank notes, or cheques. Nevertheless, there is an important difference between money and bills of exchange. When a currency is properly regulated, its component parts are not liable to fluctuate in value relatively to each other; 1,000 florins in bank paper are always worth 1,000 florins in coin. But the rates of exchange are constantly varying. A bill on Paris does not always cost 48 florins per 100 francs, but sometimes 47·90, sometimes 48·10 florins. A bill on London is not always to be had for 12·10 florins per pound sterling; sometimes more has to be paid for it; sometimes less. It is for the purpose of explaining this, and of stating both the causes and limits of these fluctuations, that we expound the theory of foreign exchanges. We will do this later on. For the

present we will confine our attention entirely to the bill of exchange itself, so as to arrive at a clear understanding of its purpose and nature.

In this connection something yet remains to be said. The obvious question presents itself, as to how the person, who has a payment to make to some one residing abroad, gets to know that some other person has a payment to receive from a debtor residing in the very same place? Again, is it not by mere chance that the sum which the one has to pay coincides with that which the other has to receive? May it not happen that while many people are in the position of having to send remittances to Paris, the bulk of the bills in the market are on London, Berlin, or elsewhere?

The answers to these questions will be found in what follows. Supply and demand are brought together through the medium of bill brokers. The person who wants to send a remittance abroad, or has a bill to dispose of, consults his broker, and the latter endeavours to accommodate him. There is a regular trade in foreign bills, just as there is in goods or stocks. Such bills can be obtained or disposed of in any large commercial centre by any one who is prepared to offer or accept such a rate of exchange as will ensure a suitable profit to foreign bankers. Indeed, if it were not for these, trading in bills could only be carried on with great difficulty. Let us glance at the operations of the bankers, in so far as they have reference to the subject in hand.

Every foreign banker has relations with foreign bankers abroad, and keeps himself constantly informed of the rates of foreign exchanges and stocks. If a banker in Amsterdam gets to know that there is a strong demand in Paris for bills on London, and a redundancy of such bills in Amsterdam, he buys some of them and sends them to his correspondent in Paris. He thus becomes entitled to a remittance of money from his Paris correspondent, and there are several ways in which he may recover this money. His simplest plan is to draw a bill for the amount, but he may find some other plan more advantageous. While bills on London are redundant in Amsterdam, and in strong demand in Paris, it may happen that bills on Berlin are scarce in Amsterdam and redundant in Paris. In that case our banker will probably instruct his correspondent

to send him the equivalent of the London bills in bills on Berlin. The business arising out of this is called arbitration of the exchanges. Just as the merchant makes his profit out of differences in the prices of goods, so the foreign banker makes his out of differences in the prices of bills, and the operations both of the merchant and the banker have the beneficial effect of reducing these differences to a minimum. The expenses connected with this sort of business are trivial, consisting of nothing but a small commission and the cost of bill stamps and postage; but owing to the keenness of the competition among bankers, the gains usually amount to only a little more than the expenses. It is only when credit has been severely shaken, owing to special causes, that we find considerable differences in the rates of exchange prevailing in different markets for bills of the same kind, or in the rates between two places drawing bills on each other. An instance of this occurred in July 1870, when the Franco-German war broke out. It was not long, however, before confidence was restored, and things then resumed their normal course. All trading in bills is based on confidence. If the foreign bankers in different places had no confidence in each other, or distrusted the firms offering them bills for sale, trading in bills would be quite impossible.

The instance given above was one of arbitration of the exchanges pure and simple; but trade in bills may also be combined with trade in stocks and precious metals. Suppose that there is a strong demand for bills on Paris, but that the supply of such bills is short. French bills now become dearer, and it may be profitable for bankers to send stocks to Paris and draw bills for the amount. If no profit is to be got by sending stocks, then gold can be sent. There is always a rate of exchange at which it becomes profitable to draw bills, just as there is a rate at which it becomes profitable to buy them. A very slight variation in the rate of exchange will often suffice to elicit supply or demand in the matter of bills of exchange.

The statement just made is true, quite independently of the co-operation of the bankers. Suppose that a quantity of goods, bought in Amsterdam for 12,000 florins, could be sold in London for £1,000, clear of freight and all other charges,

would it be advantageous to buy those goods and send them to London? Not so long as the exchange was at 12 florins to the £ sterling. But were it to rise to 12·15 florins, a profit of 150 florins could be made by the transaction (12·15 florins \times 1000 = 12,150 florins). Every rise in the value of foreign bills of exchange has a tendency to cause goods to be exported, which could not have been exported with advantage before, and export of goods brings forth supply of bills. For, as soon as a merchant has sent goods abroad, he draws for their amount, unless he has come to some other arrangement with his correspondent, or finds it to his advantage to await remittances.

Conversely, every fall in the value of foreign bills tends to make it profitable to import goods which could not have been imported with profit before. A quantity of goods bought in London for £1,000 can be sold in Amsterdam for 12,150 florins, clear of freight and all other charges. So long as the English exchange in Holland stands at £1 sterling for 12·15 florins—in other words, so long as it costs 12,150 florins to buy the £1,000 in bills which must be remitted to London in payment for the goods,—there is nothing to be gained by importing those goods. But were the value of bills to drop, so that instead of 12,150, only 12,000 florins had to be paid for the bills, the situation would change at once. With bills of exchange, as with most other things, higher prices bring increased supply and lower prices the reverse.

In what has been said so far, it has been our special aim to explain the trade carried on in bills of exchange; to make the reader understand how those who have payments to make to, and those who have payments to receive from, persons residing abroad, are brought into relation with each other; how, even when their wishes do not quite coincide, they are enabled, through the medium of the bankers, to help satisfy each other's wants; and furthermore, how supply and demand, in the matter of bills of exchange, depend upon the prices of such bills. The bill of exchange is a medium of payment, one which has to be bought with money, however. The dearer it becomes, the smaller will be the profit derivable from such import business as necessitates our acquiring this medium for purposes of payment; the greater, however, will be the

profit derivable from such export business as affords us an opportunity of supplying it to others.

A few words more. There are countries which, though importing only from a few, export to a large number of countries. For instance, nearly the whole of the imports into British India from Europe come from the United Kingdom, whereas a considerable part of the exports of British India go to countries other than the United Kingdom. Owing to this, a merchant in Bombay or Calcutta, who had sent goods to Hamburg, would experience considerable difficulty in finding any one to whom he could dispose of a bill on the latter place; he could find purchasers far more easily for a bill on London. This difficulty is overcome by having recourse to the mediation of London bankers. A person who sends an order from Hamburg or Amsterdam to Bombay or Calcutta, always sends with it what is called a "confirmed credit on London"; which means that he authorises the Indian house to draw on an English bank for the value of the goods ordered, and this authorisation is "confirmed" by the bank in question. In such a case the London banker will, before long, have a debt to claim from the Amsterdam or Hamburg merchant; it is as if the claim of the Indian house had been transferred to the banker in question. But our merchant will have no difficulty in settling his debt, since bills on London are always procurable both in Hamburg and Amsterdam; for, as every one knows, both Germany and Holland export considerable quantities of goods to the United Kingdom. The arrangement, therefore, comes to this, that Germany and Holland do not pay British India for what she has sent them, but they pay the United Kingdom instead. They cover their imports from the former country with their exports to the latter; and for the goods which the United Kingdom sends to British India she receives an equivalent from Germany and Holland. Since the system of confirmed credit on London is very extensively applied—in relation not only to British India, but to China, Australia, and America as well; and in favour not only of Amsterdam and Hamburg, but of a very large number of other places too—we may assume that a considerable part of the import trade of the United Kingdom is concerned with the system

in question. The United Kingdom receives grain from New York, wine from France, and cattle and dairy produce from Holland, in exchange for cotton goods and iron wares, which she has sent to Asia.

It is the trade carried on in bills of exchange that renders all this possible. By reason of that trade it is possible for a country which exports goods to one place only, to import goods from a hundred other places, and yet pay for her imports with her exports. Great as is the economy in the use of precious metal exercised in inland trade, that exercised in international trade is far greater still. Months pass sometimes without a single ounce of bullion being taken over the Dutch frontier, though the foreign trade of Holland, including trade in stocks and bonds, is very considerable indeed. Practically all accounts are settled by means of bills of exchange; or, if not in that way, by book transfers or by telegraphic money orders, which enable even bills of exchange to be dispensed with.

Have we now said all there is to say concerning the purpose of the bill of exchange? Does the bill of exchange, like the bank note or the book credit, fulfil no other purpose than that of a medium of payment? In the case of the short bill—the bill which matures within a few days of the date when it was drawn—this is undoubtedly so; such paper fulfils no other purpose than that of a medium of payment. But there are also bills which do not mature until two, three, or six months after the date which they bear, or on which they are presented for acceptance, and such bills are something more than a kind of international medium of payment. They are also a *medium for procuring capital*. A merchant in Manchester sends goods to a merchant in Amsterdam and draws a bill at three months on the latter for the amount, which bill he sells forthwith. In this way he actually receives the equivalent for the goods sent abroad, and he is enabled to replenish his stock the very same day. Now, from whom does he receive the equivalent? Not from the merchant in Holland, to whom the goods were supplied on credit, but from the person who buys the acceptance. That person has temporarily invested part of his capital in a bill on Amsterdam,

or, to express it more accurately, he has parted with a portion of his capital in exchange for a bill on Amsterdam.

But the bill of exchange is used as a medium for procuring capital in a great variety of circumstances besides those involving export business. A foreign banker will frequently open a credit account with a commercial firm in order to furnish that firm with capital to be used for general business purposes, that is, without reference to any particular undertaking contemplated by the firm. Such credits are of a special character. The banker merely lends his name, for he expects to receive the where-withal to meet the bill before it reaches maturity. The person who buys it may dispose of it very quickly to some one else, and then he will soon have his money back again. The bill may change hands several times before maturing, in which case each holder in turn succeeds to the *rôle* of supplier of capital. And the capital supplied may change its form ever so many times, since the goods which the drawer of the bill has in stock may vary from day to day. There are people, the bulk of whose property always consists of bills of exchange. No sooner have they sold or received payment in respect of one bill, than they get another in its place. Such a person may be said to have given his capital to society collectively, and in exchange to have received paper representing all sorts of claims on its members individually. But his debtors are constantly changing. To-day they may be Germans, to-morrow Englishmen or Frenchmen, next day perhaps Dutchmen or Belgians.

It is a matter of common knowledge that the bill of exchange, as a medium for obtaining capital, is frequently abused; but it would be difficult to trace the line which divides its legitimate use from its abuse in this connection. Bills other than those drawn on recipients of goods or bonds consigned abroad are sometimes spoken of in terms of disparagement.¹ But why should such a view be taken of a transaction which is not wrong in itself? It is only wrong when carried to excess. A person who gets credits opened to him right and left, with the object of trading far in excess of his resources, thereby exposes others to the risk of loss, and in so far does wrong. But why should it be considered

¹ In Holland such paper is called "chimney-paper," in France *papier de complaisance*.

objectionable for a merchant who has been confidently expecting a remittance, and has been disappointed in his expectation, to get a credit opened to him through one of his commercial friends? Such credits may be abused, but it does not follow that they *must*.

As a medium for obtaining capital, use is also made of the inland bill of exchange. Where banking is in an undeveloped condition, the bill of exchange fulfils the same *rôle* in inland trade as it does in foreign trade. Prior to 1863—that is, before there were any National Banks in the United States—bills on New York were negotiated in Chicago, New Orleans, and elsewhere at fluctuating rates of exchange; for, a person who had to send a remittance to New York preferred paying a small premium for a bill to being put to the trouble and expense of sending gold; and a person in New York, having a debtor residing in one of the other cities, preferred drawing a bill on the latter, thereby incurring a slight loss, to having the amount remitted to New York in specie. In those days, therefore, the price of bills was sometimes below, sometimes above par, according as the preponderance lay with demand or with supply. These fluctuations are now no longer possible, because people can send each other bank notes. Where banking is strongly developed, and particularly where there is a central credit institution, which greatly facilitates transfers, the inland bill, though not obsolete, is by no means indispensable.

But as a means of procuring capital the bill of exchange still retains its importance even in inland trade. And this importance seems likely to increase by reason of the gradual disappearance of the curious provision (formerly to be found in all laws having reference to bills of exchange) that the place where a bill is payable must not be the place where it was drawn. This provision, which dates from the time of Canon Law, still figures in the Commercial Code of Holland; so that, for example, though it is permissible for a firm in Amsterdam to request a promissory note from another firm in the same city, the one must not draw a bill on the other unless such bill be payable, say, in Rotterdam or the Hague. If this provision should ever be removed from the Statute Book, the bill of exchange will probably supersede

the promissory note to a great extent; but then the former would be employed between merchants of one and the same place only for the purpose for which the promissory note is now employed—that is to say, not as a medium of payment, but solely as a means of enabling merchants to supply each other with goods on credit, and yet be in a position to obtain the equivalent for their goods in the event of their requiring it.

§ 2

Difference in Rates of Exchange as between Bills for Long and Bills for Short Terms

We now propose to discuss the prices of bills of exchange, or the rates of foreign exchanges, to use the technical expression. Before we do so, we have a few observations to offer concerning the form in which those rates are most commonly expressed.

The most usual form is that employed in Holland, where the rate is expressed in the currency of the country in which the bill is negotiated. A bill on London is said to be worth 12·05 or 12·10 florins per £ sterling; a bill on Paris is quoted as worth 47·95 or 48·05 florins per 100 francs; a bill on Berlin as worth 59·20 or 59·40 florins per 100 marks, and so on. This method of quotation is both simple and practical. Simple, because all prices are quoted in this way; and practical, because when we say that “the rate of exchange” has risen, we really mean what that statement expresses, namely, that bills of exchange have become dearer.

The English method differs from this. In England, as a rule, the rate is quoted in the currency of the country in which the bill has to be met. A bill on Paris is said in London to be worth, not £4 or £3 : 17 : 6 per 100 francs, but 25 francs, or 25·25 francs per £ sterling. It is as if we were to say that sugar cost 5 or 6 lbs. per shilling. The same method obtains in Batavia. When the exchange for bills on Holland is there quoted at 99 florins, it means, not that a bill for 100 florins on Holland will fetch 99 florins in Batavia, but that 100 florins will have to be paid in Batavia for a bill of 99 florins on Holland. A low quotation, according to the English and

Dutch-Indian system, therefore, denotes a high price. Thus a fall from, say, 25·25 to 25·10 francs in the rate quoted in London for bills on France, or a fall from, say, 101 to 100 florins in the rate quoted in Batavia for bills on Holland, really represents a rise in the rate of exchange.

We have thought it necessary to mention this little matter, for it is a point with which one has to be acquainted in order to be able properly to understand the works of English writers on this subject. Here we propose to follow the Dutch method. *By a rise in the exchange we shall, therefore, always mean a rise in the price of foreign bills.*

In looking for the causes which determine rates of exchange, we must distinguish carefully between two questions. What determines the rate for long- as compared with that for short-term bills, and what determines the rate for short-term bills themselves? We have not to look far for the answer to the first question.

The difference in price as between bills for long and bills for short terms consists of interest. Given two bills for equal amounts, the one entitling the holder to immediate payment, the other entitling him to payment at the expiration of two months, but not sooner, the former will exceed the latter in value by a sum corresponding to two months' interest on the amount for which the bills are drawn. Having said this, we should have said all that was needful, but for a circumstance which frequently arises and which introduces a little complication. The rate of interest is not everywhere the same. It may be 8 per cent. in New York, while it is 3 per cent. in London, and then the question arises, which rate determines the difference between the prices for long- and those for short-term bills of the United States on England? Is the difference determined by the American, or by the English rate of interest?

In this case it is determined by the latter, for the difference in price between a long- and a short-term bill for the same amount can never be greater than a sum corresponding to the interest for the time of the former's maturing in the place where the drawee is domiciled. The reason is, that money can always be got at once for a good bill in the place where that bill has to be met, and subject to a deduction for interest

at the current rate. This deduction is called discount. When the rate of discount in London is 3 per cent. it signifies that the holder of long-term bills payable in England can obtain money for them at once from London banks, provided he be willing to submit to a deduction at the rate of 3 per cent. per annum on the amount of the bills. As the London rate of discount is known everywhere, holders of long-term bills on London will not accept a lower price for them than that for short-term bills, less interest at the rate current in England. And to the buyer of bills it is immaterial whether he take long-term bills at this price or short-term bills at the current rate of exchange, for he receives the same value in either case. It is certain, therefore, that the difference in the rate of exchange between long- and short-term bills can never exceed interest at the rate known to be current in the place where the bills have to be met. When used in this connection, the expression "rate of interest" always stands for discount.

The difference can never amount to more than what has just been stated; but should we be equally right in saying that it can never amount to less? We should not. The rate of discount current in the place where the drawer resides has no effect so long as it remains higher than the rate current in the place of domicile of the drawee. Whether the rate of interest in New York stands at 8, 9, or even 20 per cent., it makes no difference to the relative value of long-term bills on England, so long as bills can be discounted in London at 3 per cent. But if the situation be reversed, if, in the drawer's country, the rate of interest be *lower* than in the country of the drawee, the former rate occasionally acquires an influence which under ordinary circumstances it lacks.

Under ordinary circumstances; but as a matter of fact such a situation as that just described is most unusual. Whenever two countries, in which, as a rule, the rates of interest current at any time are different, trade with each other, the whole of the capital required for this trade is in most cases supplied by the country in which, as a rule, the lower rate of interest is current; which means that this country does not insist on receiving an immediate equivalent for the goods which it exports, being content to receive it

later on.¹ It is to some extent owing to this that the long-term bills between the two countries usually flow in one direction, and that is, from the country with the higher to that with the lower rate of interest. When, for instance, a manufacturer in Holland sends goods to Batavia, he does not draw a three or a six months' bill on Batavia, but waits for his remittance until after the goods have been duly delivered and sold. If he should happen to need capital in the meantime, he would procure it through some firm or credit institution in Europe. There are establishments which make it their business to supply capital to persons and firms so situated. Such establishments belong to the category of "general banks" mentioned on page 503.

But it frequently happens that in a country where it is usually lower the rate of interest becomes instead temporarily higher than in other countries. England usually has a lower rate of discount than most of the countries with which she trades; and yet, in 1866 the English Bank discount stood for months together at 10 per cent. In such a case, the difference in the rate of exchange between long- and short-term bills may be less than the figure indicated by the rate of interest current in the place where the bills have to be met; for then foreign capitalists, in order to profit by the high interest, will be anxious to buy long-term bills drawn on such a place. The result of many competing in the purchase will be a slight rise in the price of the bills; so that if the rate of interest were 3 per cent. in Amsterdam, and 10 per cent. in London, persons in the former place investing in long-term bills on the latter would make not 10, but perhaps 7 or 8 per cent. per annum on their investment.

It may be asked why competition in this case does not effect a still further reduction in the profit, bringing it down to, say, $3\frac{1}{2}$ or 4 per cent. per annum? The reason is, that the investment of capital in foreign bills is always attended with a certain amount of expense, and—what is of still more importance—may be attended with some loss. Suppose a merchant in Amsterdam buys long-term bills on London, when the rate of exchange quoted in Amsterdam for short-term bills on London is 12.15 florins per £ sterling; and suppose

¹ Cf. *ante*, pp. 206–208.

that by the time the former have matured the latter are being quoted at 12·05 florins; in that case the merchant will lose 0·10 of a florin per £ on exchange, which will diminish the amount accruing to him as interest on the transaction. Suppose that interest to have been at the rate of 8 per cent. per annum, which means 2 per cent. for three months, and that the bills purchased were to mature in three months, then the drop in the price of short-term bills will have brought our merchant's profit on the transaction down to $1\frac{1}{8}$ per cent. ($4\frac{2}{3}$ per cent. per annum). This possibility is taken into consideration by capitalists investing in long-term foreign bills, and thus anything like a considerable reduction of the difference in rates of exchange as between long- and short-term bills is prevented. The higher the price of short-term bills, the more potently does this cause operate, for the danger of a fall is then greater. But, for reasons which will appear later, short-term bills are generally dear in a country where the rate of discount has experienced a considerable rise, so that it may be regarded as a quite exceptional thing for the cause just mentioned not to assert its influence strongly.

The rule which asserts that the difference in the rates of exchange as between long- and short-term bills is determined by the rate of discount current in the place on which the bills are drawn, is, therefore, on the whole, correct. One point only has to be noted, and that is, that when the rate of interest is *higher* in the place where the bills will have to be met than in the place where they have been drawn, the difference may be less. But it can never be much less.

§ 3

Limits of Fluctuation of Foreign Exchanges

The question, what regulates the prices of short-term bills, is one that calls for somewhat more reflection. The expression "rates of foreign exchanges," when used throughout the following pages, is intended to refer to rates for short-term bills, unless the contrary be distinctly stated.

Let us first inquire as to the limits within which rates of foreign exchanges can fluctuate. Various cases here suggest

themselves, but to avoid prolixity we shall confine ourselves to three, assuming each of them in turn as applying to the country where the bills are drawn, and where, therefore, the rates which we propose to examine are quoted. We shall assume of the country (i.) that it has the single gold standard; (ii.) that it has the single silver standard; and (iii.) that it has a currency in which silver token money circulates together with gold as full legal tender, while the Legislature has taken no steps to secure the former against depreciation (*étalon boiteux*). Let Holland be the country to which each of these cases successively is to be regarded as applying, and let the expressions "foreign" and "abroad" be understood as having reference to England. The question to be solved now is this: Within what limits can the rate of exchange on London rise and fall in Holland, supposing that country to have (i.) the single gold standard; (ii.) the single silver standard; and (iii.) the *étalon boiteux*.

(i.) If gold were the only metal circulating in Holland as legal tender, the price of English money expressed in Dutch currency could not vary much, as the cost of minting ten-florin pieces from sovereigns would be only about $\frac{1}{3}$ per cent., while that of having ten-florin pieces made into sovereigns would be nil, since no seigniorage is charged in England. Hence the rate of exchange on London even for short-term bills could not rise or fall much in Holland under the circumstances assumed.

The sovereign contains 7.322 and the ten-florin piece 6.048 grammes of gold; the par of exchange, as it is called, is therefore approximately 12.10 florins per sovereign. If we allow 8 cents on every £ sterling for seigniorage, transport, and banker's profit, it follows that the rate of exchange on London could not fall below 12.02 florins per £ sterling in Holland, so long as the gold standard remained in operation in that country. As a matter of fact, the limit is not so low as this. For it is the practice of the Netherlands Bank to give for foreign gold a little more than the metal would fetch at the Dutch Mint;¹ even with the exchange at 12.04 florins per £

¹ From a kilogramme of gold, 1,653.44 florins are coined. The seigniorage is 5.55 florins, so that the bank need not give more than 1,647.89 florins, instead of which it gives 1,648 florins for bars, and a little more for sovereigns.

sterling a large influx of gold into Holland is usually found to take place.

By applying the same method, we can find the utmost limit to which the rate of exchange can rise; as soon as the rate for bills on London reaches the point at which it becomes advantageous to send gold to England, the upward movement ceases of itself. The Bank of England is bound by law to pay £3 : 17 : 9 per ounce troy for all gold offered to it, while £3 : 17 : 10½ are coined from an ounce of gold. The German *Reichsbank* pays 1,392 marks per *Zollpfund* of gold, from which 1,395 marks in gold pieces are coined; the corresponding Bank of Austria pays 3,276 kronen per kilogramme, from which 3,280 kronen in gold are coined. The Netherlands Bank is not legally bound to any fixed price for gold, but it acts as if it were.

(ii.) We have now seen that in order to calculate the highest point to which it is possible for the rates of exchange to rise in Holland, the chief subject of inquiry should be that of the monetary value of Dutch currency abroad; while, in order to calculate the lowest point to which the rate of exchange can fall in Holland, our inquiry should be mainly directed towards ascertaining the monetary value of foreign currency in Holland. This monetary value would be practically constant if both the Dutch and the foreign currency consisted of gold; there would then be a fixed par of exchange, representing the centre about which the rates of exchange would move. But no *fixed par of exchange* is conceivable between two currencies consisting of different metals, so long as the relation between those metals is subject to variation. A sovereign must always be worth about 12·10 florins in Dutch gold, because 12·10 is the quotient of $7\cdot322 \div 0\cdot6048$. But what is the quotient between 9·45 grammes of silver and 7·322 grammes of gold? From 1847 to 1873, when Holland had the single silver standard on the basis of 9·45 grammes per florin, or 105·82 florins per kilogramme of fine silver, the fluctuation of the Dutch exchange was confined to fixed limits, but only as regards bills on countries having, like Holland, the single silver standard, and not in regard to bills on countries where gold was the standard. Thus there was a fixed par of exchange with Hamburg and Berlin; but not with London, Brussels, or Paris.

There did, nevertheless, exist a par of exchange between Holland and the three last places mentioned, but not a fixed par; there were limits of fluctuation, but not fixed limits. For instance, silver was worth 60*d.* per ounce troy standard metal. This meant that 31·1 grammes of silver $\frac{222}{240}$ fine fetched $\frac{60}{240}$ of £1 sterling; in other words, that £1 sterling was equivalent to 12·17 florins in Dutch currency. When, under these circumstances, a considerable rise—say to 12·23 florins—took place in the exchange on London, it became profitable to send silver thither and to draw bills for the amount; this had the effect of an automatic check upon the rise. The figure just stated therefore represented the highest limit to which the rate of exchange on London could rise, so long as silver remained at 60*d.* per ounce. And as it was also possible to *buy* silver at this price, there was also a limit below which the exchange could not fall. Under former laws the Netherlands Bank used to pay a fixed price of 104·65 florins per kilogramme for all silver offered to it, just as it now pays a fixed price of 1,648 florins per kilogramme for bar gold. While, therefore, silver was at 60*d.* per ounce, the quantity of that metal obtainable in London for a pound sterling fetched, in Dutch currency, 12·04 florins,¹ or, after deducting expenses and banker's profit, 11·98 florins.

But these limits of 12·23 florins and 11·98 florins shifted with every change in the market price of silver in London. If the currency of Holland were still regulated by the law of 1847, it would be impossible at the present time (when silver is being quoted in London at 30*d.*) for the Dutch rate of exchange for bills on London to rise beyond 24·46, or to fall below 23·96 florins per £ sterling, reckoning one-half per cent. for expenses and banker's profit, which, it should be stated, is an ample allowance.

We repeat, therefore, that a par of exchange does exist between countries having different monetary standards, but

¹ For, x florins = £1.

£1 = 240*d.*

60*d.* = 1 oz. troy, standard silver.

240 standard = 222 fine.

1 oz. troy = 31·1 grammes.

1,000 grammes = 104·65 florins.

Thus x = 12·04.

not a fixed par; that the fluctuations in the rates of exchange between such countries have their limits—limits, however, which are not always the same. The disadvantage arising from this was slight so long as the relation in value between the two metals remained fairly steady. Between 1860 and 1870 the price of silver in London never rose above $62\frac{1}{2}d.$ nor fell below $60d.$ The former price was quoted in January 1864, the latter in May and June 1869, so that a period of more than five years intervened between the two extremes in price. How matters have since changed every one knows. In 1894 silver fell to $27d.$ per ounce.

(iii.) And now for our third hypothesis. Supposing that what has been called the *étalon boiteux* were in operation in Holland, what would be the limits within which the rates of exchange quoted in that country for bills on England could fluctuate? In the following, we must forget the existence of the law of April 27th, 1884, as well as the fact that the Netherlands Bank has made it a practice to issue gold at par whenever it becomes necessary to do so for the purpose of steadying the exchange. Both the law and the practice of issuing gold at par are designed to obviate the evil which we are about to point out.

Under the system we now speak of there is, indeed, a fixed limit to the *fall* which may take place in the prices of bills on countries where the standard metal is gold; but as regards the *rise* only an uncertain limit exists. To put it in other words: If the law of April 27th, 1884, were not in operation, and the practice of the Netherlands Bank were other than it is, the rate of exchange in Holland for bills on London could not, any more than it can now, fall below 12·02 or 12·04 florins per £ sterling; the limit to which it might rise would depend on a variety of causes.

In order to understand this, let the reader first imagine himself in the position of a person who has money owing to him in England, and who, therefore, has to draw bills on the country. Such a person is not obliged to accept any rate that may be quoted to him, for he can have the amount forwarded to him in gold, which will fetch him 12·10 florins per £ sterling. If Holland had the single gold standard, matters would not become any more favourable for her than they have

been since 1875, so far as concerns a *fall* in her rate of exchange on England.

But let the reader now imagine himself in the position of one who has to send remittances to England, and therefore to buy bills on that country. Which metal will he be able to send in the event of his being asked a very high rate of exchange? Gold? There is no certainty that he will be able to obtain gold, much less obtain it without paying a premium. He may try to collect it from among the circulating coinage, but unless he offers a premium his effort will be futile, at least so far as the collection of any large sum is concerned. He might send silver; but with that metal at 30*d.* it would cost him at the rate of 24·46 florins per £ sterling. Thus we see to what uncertainties any rise in the rate of exchange is subject where part of the currency consists of token money. Such money, whatever its value in the country where it is legally current, is never worth more in other countries than the metal which it contains.

The reader will now be able to understand more clearly than before, how the law of April 27th, 1884, has been designed to operate. Should the Netherlands Bank at any time come to the end of its stock of gold, and be therefore unable any longer to counteract an excessive rise in the rates of exchange, the Government has power under this law to melt down silver coinage and to sell the metal so obtained for what it will fetch in the market. Provided the Government does not fail to use this power in good time, and that the amount of silver which the law has authorised it to melt down (25,000,000 florins, or, say, £2,083,000) does not turn out to be too small, the evil will thus be really obviated. When the necessity arose for remitting money abroad, it would be possible to obtain for a sum of 12·10 florins such a quantity of silver as would be equivalent to one pound sterling, or 7·322 grammes of fine gold, in the world market. Thus the former limit would be preserved. A sum of 12·10 florins would purchase, not 7·322 grammes of gold, it is true, but silver worth just that much, which comes to the same thing.

It can scarcely be necessary to assume more than the three cases just discussed, seeing that the simple truth which we wished to demonstrate has now been made sufficiently

clear. An advance in the price of bills of exchange, assuming that it has not already been checked by other causes, ceases from the moment when it becomes advantageous to export bullion; while a fall in their price ceases as soon as any advantage is to be got from importing bullion. At what rate of exchange the one or the other course will yield the advantage, can be determined in each case by an arithmetical calculation. Such calculations may vary considerably in point of intricacy, because of the different kinds of monetary systems which may be in operation in the countries concerned, but the principle underlying them all is the same, and is that mentioned above.

It is very important to know the limits of fluctuation of the exchanges. When we know these limits, we are in a position to judge whether export or import of bullion, or neither, is to be expected. We do not send our foreign creditors bullion if it costs less to send them bills; nor do we ask our foreign debtors to send us gold and silver if it be more to our advantage to draw bills on them. Export of bullion is always preceded by a rise, and import of bullion by a fall, in the rates of foreign exchanges. One of the limits must have been reached, or at any rate approached, if bullion is to be exported. Those who know the limits of fluctuation of the exchanges between the various countries can interpret the figures published day by day in the principal newspapers, just as those who are accustomed to meteorological observations can interpret the readings of the barometer as published for different localities. The rates of exchange with foreign countries are just like barometrical readings. They inform us as to the state of the *balance of payments*.

The expression just used is technical. The balance of payments is said to be unfavourable when bills are scarce and bullion leaves the country; in circumstances the reverse of these, it is said to be favourable. These expressions came into vogue at a time when all exports of precious metal were held to be disadvantageous and all imports advantageous; they remained in use after the economic system to which they belonged had been condemned. And as technical expressions they were harmless. Just as dry weather is said to be "fine," though every one

knows that drought may do harm, so a balance of payments is said to be favourable though it is a matter of common knowledge that imports of precious metal do not always afford grounds for satisfaction, nor exports of such metal grounds for regret.

The rates of exchange with foreign countries thus enlighten us as to the balance of payments, and it is in this connection that they must be scientifically considered. Wherever the subject of foreign exchanges is discussed, it is invariably brought into relation with that of imports and exports of precious metal, and rightly so. There is the closest possible relationship between the questions: (*a*) What are the causes which bring about a rise or a fall in the rates of exchange on foreign countries? and (*b*) What are the causes which render the balance of payments "unfavourable" or "favourable"? Let us endeavour to bring together the data which may lead us to correct answers to these questions.

§ 4

The Causes of Change in the Balance of Payments

In dealing with this subject we come upon an error which is harmful chiefly because it proves an obstacle to further investigation. An unfavourable balance of payments is often said to be the *cause* of a rise in the rates of exchange and of a drain of bullion. The error is somewhat similar to that of describing a fall in the value in exchange of money as the *cause* of a rise in prices. A fall in the value in exchange of money and a rise in the prices of goods are two different expressions for one thing. In the same way, an unfavourable balance of payments is never the cause of bullion being exported; it simply expresses the same fact in another way. In the matter of bills of exchange, equilibrium between supply and demand is impossible at rates situated anywhere between the limits of fluctuation, and it is just this state of things that requires explanation. But we do not explain it when we say that the balance of payments has become unfavourable. The words "unfavourable balance of payments" are simply a short expression which people have agreed to use for the

purpose of describing the state of things just referred to. Why is it that the balance of payments is sometimes unfavourable? Or, to put the question in other words, what are the reasons why the demand for bills of exchange is sometimes excessive, and bullion is exported in consequence?

Whoever fancies he sees in the balance of payments a cause of the importation or exportation of gold and silver, is content with mere words, and does not search for the real causes. For instance, British India has for years been importing large quantities of precious metal from Europe. Some people think that they supply the explanation of this remarkable phenomenon when they point to the Indian balance of payments. British India, they say, exports more than she imports; she has therefore a large balance owing to her from Europe, and receives the greater part of it in the form of gold and silver. What does this explain? What more does it do than repeat in other words what has already been stated? Why does not India export less goods to, or import more goods from, Europe? The metal which Europe sends annually to India, she obtains from America and Australia in exchange for products of industry. Thus Europe manufactures every year certain goods, sends them to America and Australia, receives gold and silver in exchange, and sends some of that gold and silver to India. But why, it might be asked, does not Europe produce less goods for the purchase of precious metal, and more to meet the requirements of Indian consumers? In short, we want an explanation of the whole of this curious chain of facts; we want to understand the ordinary state of the balance of payments, both between Europe and the continents just mentioned, and between Europe and Asia.

That any one should maintain that gold and silver are exported in order to "adjust a balance" or "close a balance of payments" seems strange. Suppose two countries are supplying each other with goods in equal amounts, and that those sent by one of the countries include sugar to the value of so many millions per annum. Do we explain this sugar export, do we throw any light on its causes, by saying that it serves to adjust the balance of payments between the two countries? True, the balance would not be adjusted if

the exports of sugar ceased, while those of the other classes of goods remained unchanged. But the same contention would apply to every one of the various kinds of goods passing between the two countries.

There lies at the root of all this something more than mere superficiality, something more than a disposition to be satisfied with mere words. The fact is, those who point to the balance of payments as an explanation of the movements of bullion between the different countries really believe that they have explained something. Their view is based on a theory, according to which every increase in the demand for foreign products tends to *necessitate* exports of bullion; while every increase in home production of goods for the world market *necessarily* brings about imports of bullion. Similar effects are ascribed to payments of interest. According to this theory, a people whose national debt was largely in the hands of foreigners must always find a special difficulty in preventing bullion from being exported, seeing that it has to remit large sums abroad every year. On the other hand, a nation possessing a large amount of foreign bonds ought, *ipso facto*, to have a favourable balance of payments; it could not cost such a country any effort whatever to keep its stock of money from diminishing. Holders of views like these usually regard high import duties as a remedy for an adverse balance of payments, inasmuch as such duties place a check upon imports. In a later part of the present work it will be shown that this conclusion cannot be altogether rejected, but that the effect of high import duties on the balance of payments is very transient. Here, however, their effect is regarded as of a lasting character.

It seems, then, that the view which we have been discussing may have practical results, and that these may consist either in the adoption of wrong, or in the neglect of good, measures. When discussing the premium on gold in countries having an inconvertible paper currency, we noted that people prefer to attribute the premium to all sorts of causes rather than to the real one, viz. the excessive issue of notes, by which gold has been drained from the country. They then invoke the theory of the balance of payments; the drain of gold is ascribed to inequality between imports and exports,

to large remittances of interest to foreign countries. But we are left without an answer to the question, whether the inequality between imports and exports may not have its origin in the condition of the currency, and why, seeing that there is a choice between merchandise of all kinds, as well as between merchandise and bonds, the interest must be paid in precious metal. It is not true that in the case of a nation, the bulk of whose funded debt is held by foreign investors, the balance of payments has a natural tendency to be unfavourable; of course such a nation will have to send remittances for a certain amount abroad every year, but there is no economic law, in virtue of which those remittances must consist of gold and not of, say, corn or manufactured articles. It is not true that, in the case of a nation holding a large amount of foreign bonds, the balance of payments has a natural tendency to be favourable; such a nation must certainly receive much *value* from abroad every year, but what assurance have we that it will wish to receive that value in money, and not, say, in sugar or coffee? Experience shows that we have no such assurance; in fact, it teaches us that the value is always received in the shape of consignments of those things of which the nation is most in need.

It is not intended by this to deny that when a country's exports have suddenly increased owing to an increased demand abroad, gold or silver is usually sent to it; neither is it intended to deny that gold or silver is generally lost by a nation when its imports are suddenly increased owing to the failure of its crops. But these phenomena are not explained by attributing them to changes in the balance of payments. That balance would remain undisturbed if, as soon as ever foreign demand for a nation's products increased, a corresponding increase were to take place in that nation's demand for foreign products; whenever this does not take place, something requires to be explained, for, as a rule, a nation does not produce in order to increase its stocks of money, but in order to provide itself more abundantly with commodities. And if, owing to the failure of its crops, a country has to export bullion, there is still need for explanation; for, the fact that crops have failed in one country constitutes no reason why other countries should require more gold and silver. Moreover, a crop failure

affects the purchasing power of many, it causes a reduction in the demand for some articles, and therefore a redundancy of goods. That which takes place in such cases, and is commonly represented as explaining itself, is in reality a very remarkable occurrence, and requires much light to be thrown upon it. Whoever fails to see this has not yet succeeded in getting to the root of the question, or else he has not yet succeeded in freeing his mind from the ideas of the Mercantile school.

The Mercantile system does not (as has frequently, but always erroneously, been maintained) consist in regarding money and wealth as one and the same thing; it consists in assigning to money a position apart, a position which deprives it of its character of an ordinary article capable of being bought and sold, an article constituting one of the many things required by a nation, subject to the well-known laws of supply and demand, figuring at one time among things exported, at another among those imported, according as it happens to be more or less redundant. The Mercantile system consists in teaching, with respect to trade in precious metals, doctrines which would be condemned if applied to trade in other articles. It also consists in regarding money as capital *par excellence*, and exports of precious metal (even in exchange for other goods) as loss of capital.

This last observation brings us to another explanation of the movements of the exchanges, and the importation and exportation of precious metals. Unlike the one just given, it represents more than a mere repetition of the question in other and not always felicitous language; it is, indeed, an explanation. But it is not a true explanation, and we also detect in it a flavour of the Mercantile theory just spoken of.

Foreign bills are dear, we are told, and gold or silver flows out of a country whenever the indebtedness of that country to others is very great. Export of gold and silver represents *displacement of capital*, and is a result of *scarcity of capital*. The changes in the rates of exchange show the direction in which capital is moving, or is about to move. For we buy bills because we are obliged to send remittances abroad. A rise in the prices of foreign bills therefore indicates an urgent need of such bills, that is, of means of sending capital abroad. If this need were to last, if imports were to remain continuously

in excess of exports of merchandise, so that the country had to keep on sending precious metal abroad, the facts might indicate a serious condition of things. Serious not only because it involved a danger of metallic money becoming scarce in proportion to other money, but also because a general impoverishment might result from it. The chief exponent of this opinion is Mr. G. J. GOSCHEN (now Viscount GOSCHEN), author of the well-known work entitled *Theory of the Foreign Exchanges*. The theme of Lord GOSCHEN's book is, that when we export gold and silver we cede capital to the foreigner. This cession may be temporary, it may be by way of loan, in which case of course it does no harm; but a constantly unfavourable balance is highly detrimental to a country. Such a condition is detrimental, be it observed, not only, or even especially, from the point of view of the monetary circulation, but as indicating a constant diminution of capital in the country. A nation that regularly imports more than it exports, and adjusts the balance with gold or silver, consumes more than it produces, and will get into debt.¹

This also we consider to be Mercantilism. If we import corn and pay for it with manufactures, Lord GOSCHEN calls this, not a reduction of capital, but an exchange of goods against goods. But if we pay for the corn with gold or silver, he no longer speaks of an exchange, but of a cession of capital—a proof that he regards gold and silver as capital, and that he does not accord the same rank to manufactures.

Undoubtedly, the exportation of money *may* produce scarcity of capital; it does so whenever the exported money or bullion is not immediately replaced by an equivalent in goods. In such a case, however, the cause does not lie in the fact that gold or silver has left the country (for the same results would have been brought about by the exportation of sugar or cotton), but in the fact that merchandise has been sent abroad, and not yet paid for with other merchandise.

There remains a third solution of the question to be mentioned before we proceed to set forth our own views on the subject. For this third solution we are indebted to DAVID RICARDO. In his pamphlet of 1809, entitled *The High Price of Bullion*, and still more clearly in the Appendix to the fourth

¹ Cf. p. 128 of Lord GOSCHEN's work.

edition of that pamphlet (published in 1811), he demonstrates the proposition that a rise in prices of foreign bills, and the exportation of bullion, are due solely to decrease in the relative value of money. For gold and silver are ordinary commodities, their distribution among the different countries is governed by the same laws as that of all other goods. When does sugar get exported? When it is relatively more redundant, and therefore less valuable, than it is abroad. But this is precisely the condition under which bullion gets exported. If at any given moment every country possessed just the amount of money that it required, so that there was neither deficiency nor redundancy of money anywhere, what occasion could there be for any international trade in gold or silver? Such trade does not take place until the equilibrium has been destroyed either in the one or the other direction.

Let us see what are RICARDO's own words. His views were combated in an article (contributed anonymously by MALTHUS to the *Edinburgh Review*), and he defends himself as follows:—

“It is particularly worthy of observation, that so deep-rooted is the prejudice which considers coin and bullion as things essentially differing in all their operations from other commodities, that writers, greatly enlightened upon the general truth of political economy, seldom fail, after having requested their readers to consider money and bullion merely as commodities subject to ‘the same general principle of supply and demand which are unquestionably the foundation on which the whole superstructure of political economy is built,’ to forget this recommendation themselves, and to argue upon the subject of money and the laws which regulate its export and import as quite distinct and different from those which regulate the export and import of other commodities. Thus the Reviewers, if they had been speaking of coffee or sugar, would have denied the possibility of those articles being exported from England to the Continent unless they were dearer there than here. . . . What! they would have said, do you believe it possible for us to send a parcel of coffee to France to sell there for £100, when that coffee cost here £105? . . . And, I say, do you believe it possible that we shall agree to send, or France agree to receive (if the transaction is on her account), £100 in money when £95 invested in coffee and exported will be equally valuable as the £100 when it arrives in France? . . . Commodities measure the value of money in the same manner as money measures the value of commodities. If, then, commodities will purchase more money in England than in

France, we may justly say that money is cheaper in England. . . . After comparing the relative value of coffee, sugar, ivory, indigo, and all other exportable commodities in the two markets, if I persist in sending money, what further proof can be required of money being actually the cheapest of all these commodities in the English market in relation to the foreign markets, and therefore the most profitable to be exported ?”

This doctrine is attractive owing to its simplicity, and grounds for its defence are by no means wanting. We might state in its support, for example, that small exports are always to be accounted for by the level of *money prices*. Thus an unfavourable balance of payments seems to coincide with high prices; and what are high prices, but a relatively low purchasing power of money? When the balance of payments is favourable, just the opposite state of things exists. Exports must then be great, and imports smaller than usual, indicating low prices, and consequently a relatively high purchasing power, or value in exchange, of money. RICARDO’S doctrine, we feel bound to admit, is in many respects verified by experience. Moreover, it is based on a correct estimate of money. It does not deem money to be the only thing worthy of being called capital, or seek to discover special laws governing its distribution, laws different from those which govern the distribution of commodities in general.

Nevertheless, RICARDO’S doctrine is imperfect; it is even obscure. We have already had occasion to observe that it is scarcely possible to make accurate comparisons between different countries respecting the value in exchange of money, seeing that each country has articles of export, the prices of which are always lower, and articles of import, the prices of which are always higher, than elsewhere; while it has some articles which it neither imports nor exports, but which it produces and consumes itself. What then should be the standard of comparison? When may we regard the value in exchange of money as having risen, and when as having fallen? The articles of import and export have become dearer, the others cheaper; is this an indication that money has gained in value, or that it has lost? RICARDO does not answer these questions; he does not propound them. For him the expression, *value in exchange of money*, is self-explanatory. In this con-

nection, however, the expression requires careful explanation. There are various methods of measuring or reckoning the purchasing power of money, and it is far from being a matter of indifference here, which method we choose.

Broadly speaking, RICARDO'S view of the subject is the true one. He has taught us that it is more especially in occurrences bearing upon the state of the currency that we shall find an explanation of the movements of the exchanges, and the imports and exports of bullion; and by the very fact of teaching us this, he has shed a startling light on the subject. But occurrences bearing upon the state of the currency are more frequent than RICARDO would lead us to understand, and for that reason the formula with which he presents us is not very useful. Availing ourselves of his conclusions, and also of those which he lays down in writings other than that just referred to, we will now state what, in our opinion, are the influences under which a change takes place in the balance of payments of a country. Unless we are mistaken, these influences may be summarised under four heads:—

(a) Changes in the relative value of gold and silver.

(b) Increase or decrease in the demand for bullion, or in the supply of the same.

(c) Exceptional demand for remittance of capital to foreign countries, especially if such demand coincide with a condition of the banks compatible with an increase of the uncovered note circulation (also the reverse condition of things).

(d) Alteration of the ratio of exchange with foreign countries.

(a) *Changes in the relative value of gold and silver.*—We will take these first, and consider them as having reference to the commerce carried on between countries having different monetary standards. It has been shown that between countries having different monetary standards, the rates of exchange are influenced by every perceptible change in the relation of value between gold and silver. In the years from 1847 to 1873, when Holland had the single silver standard, the limits of the Dutch exchange for bills in London, when silver stood at 60*d.* per ounce in the London market, were 11·98 and 12·23 florins per pound sterling; but with silver

at 62*d.*, the limits were 11·59 and 11·84 florins. Thus, it was not possible for the exchange on London to remain at the same point when silver rose from 60*d.* to 62*d.*, or fell from 62*d.* to 60*d.* per ounce. To prove this again would be unnecessary. What excites our interest here, however, is something else. That in the case assumed, the rates of exchange were bound to alter, needs no further demonstration. What we have now to inquire into, is the manner of that alteration. We want to know whether it followed directly, as a result of the change in the price of silver, or whether it was preceded by a change in the balance of payments. We shall find that it is necessary here to distinguish carefully between two occurrences.

A rise in the price of silver in London may mean either of two things. It may mean that silver has become scarce ; but it may also mean that gold has become redundant. We will first discuss a rise in the price of silver, due to relative scarcity of that metal itself. We shall find that, if the Currency Law of 1847 were still in force in Holland, it would not be possible for the balance of payments of that country to remain unchanged in the event of such a rise taking place in the price of silver.

The demand for silver has increased or the supply diminished, so that silver becomes dearer ; it rises from 60*d.* to 62*d.* per ounce. At first, this will have no effect on the value of the Dutch currency, for bullion and coin are two distinct things ; a rise in the former may, in fact must, in the present case, bring about a rise in the latter ; but a certain time must elapse before it can do this. The immediate result is, that at the current rates of exchange it becomes advantageous to send silver to, and draw bills on London. This advantage will be extensively utilised, but owing to the abundant supply of such bills the exchange on London will drop. After fluctuating between 11·98 and 12·23 florins, it will fall to about 11·84 florins per pound sterling.

But the fall in the rate of exchange exercises an adverse influence upon the export trade of Holland. Those who send goods to England receive as many pounds sterling for them as they did before, but each pound sterling only fetches 11·84 florins in Dutch currency, as compared with 11·98 to 12·23

florins before the movement began. A strong stimulus, on the other hand, is imparted to imports of merchandise, since considerably less has to be paid in florins for every pound sterling than before. From this decrease of exports and increase of imports, there gradually results a decline in many prices in Holland, to which decline the reduction in exports of bullion will contribute materially, seeing that it causes a scarcity of money. And how long will all this continue? When will the exports of silver cease, and prices stop falling? As soon as the rise of silver in the world market shall have extended to the silver currency of Holland; that is, as soon as the prices of Dutch articles of import and export shall have fallen by exactly as much as the London price of silver has risen. Then the balance of payments will readjust itself automatically.

Persons who had been unacquainted with, or failed to take note of, the course of silver prices, would have described these occurrences in an entirely different way from that in which we have described them here. When asked why large exports of bullion had taken place, they would have been disposed to say that because the imports of goods were greatly in excess of the exports, it had become necessary to send large remittances abroad in order to adjust the debit balance resulting from that excess. According to them the silver was exported in order to pay for the goods. As a matter of fact, however, the goods were exported in order to pay for the silver which had been imported in large quantities, because its purchasing power had been increased.

Again assuming the Dutch currency law of 1847 to be still in operation in its original form, we now proceed to explain the second case. The price of silver in London has risen from 60*d.* to 62*d.*, not because silver itself has become scarce, however, but because gold has become redundant. Relatively to gold, all things in England—not only silver, but labour and goods of all sorts as well—have risen. Thus no force is operating which should attract Dutch silver to England. More gold, it is true, could be obtained now than formerly for Dutch rix-dollars converted into silver bars, but then the quantity of goods obtainable for that gold would not be so great as it was before; the purchasing power of Dutch silver money in the world market would not have risen, conse-

quently there would be no reason to expect any change in the Dutch balance of payments. No cause would be operating to destroy the equilibrium between the imports and exports of Holland.

But how will the change come about in the level of rates quoted in Holland for bills on London? for a change in their level is bound to occur, now that their limits of fluctuation have shifted. The change will come about as a direct result of supply and demand operating in the usual way. There is a "schedule of prices" for bills of exchange, just as there is for goods,¹ and in the case of the former the scale undergoes a change the moment prices go up abroad. When everything abroad has become dearer, the Dutch importer can no longer continue to import on the usual terms, unless a proportionate decline takes place in the price of the bills of exchange with which he has to pay for his imports. He therefore offers less for such bills. But this will not cause any reduction in the supply of bills, for exporters of goods will, owing to the rise in prices abroad, be quite well able to accept a lower price for their bills and yet secure their usual profit. Consequently equilibrium between supply and demand in bills of exchange will be able to establish itself just as well now at the lower price as it did before at the higher. This decline in the rate of exchange, as expressed in Dutch silver money, will reflect the depreciation which has taken place in gold.

We may thus conclude that a change in the ratio of exchange between gold and silver, though necessarily causing a rise or fall in the rates of exchange between countries having different standards of currency, does not in every case produce exactly the same results. Where it betokens a change in the value of silver, it causes a change in the balance of payments of silver standard countries. This change in value may consist either in a rise or in a fall. If it consist in a rise, imports of goods will increase, exports will decline in such countries, and bullion will be exported. If it consist in a fall, the reverse of all this will happen. But none of these things takes place in silver standard countries where the change in the relation of value between gold and silver is

¹ See *ante*, p. 356.

due to causes resident in the gold. What then happens in those countries is that the prices of bills on gold standard countries experience a direct change, unpreceded by any change in the balance of payments.

From this the reader might now be disposed to deduce an important proposition. When an alteration occurs in the ratio of exchange between gold and silver, it is not always clear which of the two metals has gained or lost in purchasing power. But have we not just learnt a very simple method of instructing ourselves on this point? If we examine the balance of payments of the silver standard countries, and find it to have undergone no change relatively to countries having the gold standard, may we not conclude that the value of silver has remained undisturbed, and that gold has either risen or fallen in value? And if we find that the balance of payments of silver standard countries *has* changed relatively to countries with the gold standard, have we not a proof that silver has either risen or fallen in value?

Our answer is, No. For the balance of payments between countries having different monetary standards is not determined exclusively by the ratio of exchange between gold and silver in the world market; it is influenced by other causes as well, and these have to be taken into account. Thus in a country where the silver standard is in operation, a great decline may take place at a given moment in the demand for money, which consequently becomes redundant; at the same time, however, the ratio of exchange between gold and silver in the world market may alter in favour of the latter metal, and this alteration may originate with gold. Nevertheless, that balance will become unfavourable for the reason just stated, though the last-mentioned cause by itself would have been unable to produce that result.

(b) *Increase or decrease in the demand for bullion or in the supply of the same* is the second point which we have to consider. Such increase or decrease may occur either in the country itself where the balance of payments has changed, or it may occur abroad. We will first suppose it to have occurred in the country itself, and point out the principal causes which may give rise to such an occurrence.

The quantity of specie or bullion needed by a country

depends upon its inland trade, and upon the extent to which it is able to economise in the use of metallic money by having recourse to instruments of credit. Here at once we have two great causes of increase or decrease in the demand for metallic money. The volume of inland trade may change, so also may the extent of the economy practised in the use of metallic money. Commerce may increase or decline, but so also may the uncovered circulation, while the country's demand for money remains the same.

If there be expansion of trade this expansion may be only temporary, or it may be permanent; if temporary, no change in the balance of payments need ensue where banking is well developed. There is an increased demand for money regularly every year in Holland from the beginning of April to the middle of May, and from the middle of September to the middle of January. The whole of this periodical increase is usually provided for by the Netherlands Bank. The Bank knows that the increase in its note circulation will be for a short time only—that, in a little while, its discounts and loans will diminish as quickly as they have increased; so long as the movement keeps within the usual limits, and does not set in at a time when the resources of the Bank are small, the Bank does nothing to interfere with it. At such times the increase in the uncovered circulation of the Bank causes no redundancy of money, seeing that no money gets into circulation beyond what suffices to meet the requirements of trade; and if those requirements diminish, the notes get returned to the Bank as credits expire. Such, at any rate, is the course of things under ordinary circumstances.

But though the Bank can provide for a temporary, it cannot provide for a permanent increase in the demand for money, because it cannot increase its uncovered note circulation to an unlimited extent. An instance of a permanently increased demand for money occurred in Holland between 1866 and 1876.¹ The amount of specie and paper in circulation in Holland (exclusive of the specie and bullion held by the Netherlands Bank) is estimated to have been £17,500,000 on December 31st, 1866; £25,750,000, or nearly 50 per cent. more, on the corresponding date in 1876—an increase

¹ See Dr. W. C. MEES' calculations in *De Gids*, 1882, vol. iv. pp. 149-163.

in the demand for money which afforded proof of brisker trade and increased national welfare. The Bank could not provide for such an increased demand as this ; other means had to be found for doing so. What were those means ?

They were the only means that any country could apply in such circumstances, and consisted in selling goods and bonds and thus procuring bullion from abroad. And that is what Holland actually did. Her balance of payments was favourable throughout the greater part of the period in question. It has been estimated that, between 1866 and 1876, her imports of gold and silver exceeded her exports of those metals by more than £7,750,000. In this way the *demand for money* was satisfied. It is somewhat unusual to speak of demand for money in this sense ; the expression is usually understood to mean demand for capital, or for credit ; and yet, it is only in the sense in which we have just used the expression that it is strictly accurate. The reason why Holland imported all this bullion between 1866 and 1876 was that she did not possess the amount of money requisite for her needs ; there was a deficiency in her stock of money, and this deficiency had to be made good somehow. Hence the low prices of foreign bills and the generally favourable state of the balance of payments. Demand for money always manifests itself in the form of supply of goods. When a country exports many things and has them paid for in gold or silver, one does not usually say that there is a strong demand for money in that country ; we say that prices there are low, exports therefore large, and that bullion flows into the country in consequence. But as a matter of fact, the influx of bullion and the export of goods are different sides of the same thing, that thing being foreign trade. Money is necessary for trade ; and as the banks are unable to supply the requisite amount, it has to be *purchased* abroad.

It does not follow that *every* influx of bullion is a proof of increased demand for money. Apart from the fact that it may indicate a redundancy of bullion abroad, it may very well be due to another cause, viz. a high bank rate.

It must be remembered that a bank of issue chiefly grants credit for short terms, so that the amount of those credits can

only be maintained under conditions analogous to those which make it possible for the population of a country not to diminish, or for the waters of a river to remain at a given level. Day by day great numbers of people have to make up their minds as to the course which they should adopt in order to satisfy their needs in the matter of money; whether they should discount or borrow at the Bank, or whether they should have recourse to some other means. Their decision is to a great extent determined by a comparison between the interest charged for credit at the Bank and that which they would have to forego or pay in the event of their procuring money in some other way. Now, if the Bank charges too much, many people will decide not to apply to it; the uncovered circulation of the Bank will then decrease, and as that uncovered circulation constitutes a considerable part of the total monetary circulation, a scarcity of money will ensue, and this will produce an influx of bullion from abroad. As regards its amount, this influx will correspond almost exactly to the reduction in discounts and loans. Therefore, though the bullion will go to the Bank, and though, consequently, the influx by itself would have increased the amount of notes in circulation, yet no such increase will be observed.

Let the reader picture the course of things to be as simple as possible, the picture cannot in this case be simpler than the reality. Day by day, as credits expire, notes are withdrawn from circulation, so that each day the aggregate monetary circulation requires replenishing. There are two direct sources from which it can be replenished. One is the Bank; the expired credits can be replaced by new ones. The other is the stock of gold and silver in the world market, and it is from this source that the monetary supply is drawn when credit at the Bank is considered too dear. The supply is drawn upon by selling goods or bonds, both of which suffer a slight decline in consequence. Even a very slight decline may suffice to render the balance of payments favourable.

We are now in a position to explain why a bank of issue has recourse to the device of raising its rate of interest when it finds its reserve too small in proportion to its cash liabilities, and why this device is successful. The explanations that have been given for this are not all satisfactory. Many hold

that the raising of the rate of interest by the banks has the effect of checking imports and promoting exports of capital, consequently of rendering the balance of payments favourable. But this does not explain why the imported capital should consist of gold and silver and not of other things. It might consist of cotton or sugar, neither of which would avail the Bank anything. This doctrine is based on the Mercantilist view, the unsoundness of which has already been pointed out. There are others, again, who say that to raise the rate of interest is to damp the spirit of enterprise, consequently to exercise a depressing effect upon the prices of goods, more especially on the price of bonds, and that is why it has a favourable effect upon the balance of payments. This is true, but it takes no account of certain facts which must not be overlooked. When interest is high many people take to exercising greater economy in regulating their stock of money. This produces a decline in the demand for money, and it must be admitted that the effect of a redundancy of money on the balance of payments is not favourable, but the reverse.

No ; the main reason why the reserve improves after the Bank has raised its rates of interest is to be found in the fact that by so doing the Bank deters further demand for credit. A general rise in rates of interest all over the country would not serve the purpose of the Bank so well as does an increase in its own rates. The higher these are above the general level, the greater will be the decline in the Bank's discounts and loans, the greater, therefore, the deficiency in the monetary circulation, and the more quickly will that deficiency be made good from foreign sources. The Bank must be dear in comparison with other sources of monetary supply. If there be a general rise in rates of interest, and those of the Bank simply share in that rise, then there will be only one quarter from which to expect relief, viz. the effect on the prices of goods and bonds described above ; but the depletion of monetary stocks, which invariably takes place in such circumstances, would exercise an influence tending in the opposite direction, and that influence might prevail. But if the Bank raises its rates of interest above the general level, it is sure to achieve the object it has in view. By so raising its rates, it reduces the uncovered circulation, and consequently makes money scarce.

The point on which we should dwell in the second place is to a great extent already explained by all that we have just been saying. Next to changes in the volume of trade, increase or decrease of economy in the use of bullion or specie is one of the chief causes of change in the balance of payments. In the foregoing we assumed that such economy had decreased, owing to the Bank demanding excessive rates of interest; but we might also assume that the exercise of such economy had *begun* or *increased*, in either of which cases the opposite to what was described above would take place; that is to say, the balance of payments would become unfavourable, and bullion would be exported. Suppose a bank of issue to be established in a country where such an institution has previously been wanting, and that it quickly acquires the confidence of the public, so that everybody accepts its notes. So long as this bank issues no notes otherwise than in exchange for specie, and grants no credits otherwise than from its own capital, its existence has no effect upon the balance of payments. That is not so when the bank issues notes against which it holds no metallic reserve. If the issue be effected at a time when there is no change in the demand for money, the balance of payments must become unfavourable, and a very salutary outflow of bullion must ensue.

We call this outflow very salutary because it tends to increase the income of the nation. For what takes place? Money becomes redundant, the prices of a number of things go up, exports decline and imports increase; the place of the exported bullion is supplied by machinery, cattle, articles of consumption, and interest-bearing securities, an exchange which cannot fail to be beneficial to the country. The fixed capital of its manufacturers and agriculturists becomes somewhat larger, so also the stocks of its shopkeepers. The population does not become wealthier, and yet its condition becomes the same as if it had. But it has learnt to make better use of its wealth. Its gold and silver have, to a certain extent, been replaced by more useful things.

When, therefore, a bank commences to issue, or, within the limits of prudence, increases its issue of uncovered notes, and when exports of bullion take place in consequence, these exports must not be deplored. It is the *business* of a bank to

drive away gold or silver ; this is the very purpose for which it is established. Economy in the use of bullion *implies* that a certain quantity of specie has become redundant. To wish for such economy and yet insist that exports of bullion should be prevented is absurd. There is no economy so long as there are no exports.

We must, however, here repeat a remark which we have already made—namely, that increasing the uncovered circulation does not invariably cause the balance of payments to turn. It fails to do so when it coincides with an increase in the demand for money. Demand for credit at a bank may mean either of two things. It may mean demand for capital. In that case the notes of the bank are in demand, not because more money is needed for trade, but because more capital is needed for production, for commerce, for the purchase of foreign securities. The demand for bank paper is in this case an indirect demand for other things ; for every note which the bank puts into circulation gold or silver will be exported, and just those things will be imported which the public is desirous of having. But demand for credit at a bank may simply mean demand for money for its own sake. In that case the notes issued by the bank remain in circulation, and the prices of foreign bills do not rise, because the increased supply coincides with an increased demand for money.

Throughout the foregoing, the events described have been regarded as taking place only in the country whose balance of payments we were considering. But the same events may happen in other countries as well. Bullion is liable to changes in supply and demand abroad as well as at home, and such changes are not without their effect on a nation's balance of payments. Suppose, for example, that everywhere abroad gold were to rise in value by reason of a diminished output at the mines, or because of the banks having reduced their uncovered circulation, or the demand for money increasing, or finally because gold was being largely substituted for silver in the currencies of foreign countries. So long as this rise in value did not extend to the gold existing at home, our balance of payments would be unfavourable. Our

imports would exceed our exports, and we should have to pay high prices for foreign bills.

For dearer gold, where the gold standard is in operation, means lower prices, and the decline of prices abroad would stimulate our imports and impede our exports. The altered state of our balance of payments would probably not last long. It would terminate as soon as the prices of the articles of international trade had fallen as much at home as abroad, and three causes would co-operate towards hastening such fall, namely, the increased imports of foreign products, the decreased exports of home products, and the scarcity of money which would gradually supervene. In a small country the level of prices cannot remain relatively high for long. In a large country, however, it might be a long time before the old equilibrium was restored.

It is not necessary to dwell further on this, or to prove in a detailed manner that in this case, too, the movement of gold would be the cause, and not the result, of the movement of goods. Gold would be exported not for the purpose of re-adjusting some balance, but because the demand for gold had increased or its supply diminished.

(c) *Exceptional demand for remittance of capital to foreign countries, especially if such demand coincide with a condition of the banks compatible with an increase of their uncovered note circulation.*—This is the third cause of change in the balance of payments which we have to consider. A state of things exactly the reverse of this is also conceivable: there may be exceptional demand for remittance from abroad, while the banks would be glad to reduce their uncovered note circulation. But it will be sufficient to explain one side of the question, so that we shall only discuss a *rise* in the prices of foreign bills and the *exportation* of bullion.

Exceptional demand for remittance of capital to foreign countries may originate in various ways. When a merchant orders goods from abroad he does not, as a rule, know to what extent others have been ordering the same kind of goods. In this way the market may get overstocked, in which case there are always many who hold their stocks for a while in the hope that the price will improve. Meanwhile they must pay for what they have bought, and so

there arises an exceptional demand for remittance to foreign countries.

The same thing may be brought about in various other ways. Crops have failed, and it becomes necessary to import large quantities of grain. A foreign Power contracts a large loan, the proceeds of which have to be sent to it within a short space of time. A considerable rise in the rate of interest takes place in neighbouring countries, and many people are anxious to take advantage of it. In all these cases there is exceptional demand for bills of exchange. But it would be hasty to conclude that the price of bills must now approach its highest limit, and that bullion must be sent out of the country. Before being justified in drawing such a conclusion we should have to institute an inquiry with reference to a very important point.

Is it not possible, too, that the very occurrences which give rise to the demand for bills may in some other way cause a plentiful supply of bills to be forthcoming? May not these occurrences lead to a condition which makes it necessary for goods and securities to be exported? And is it inconceivable that all these things operating together should have the effect of entirely, or almost entirely, maintaining the equilibrium between supply and demand in the matter of bills of exchange?

Imagine a country where there are no banks, or at any rate none capable of increasing their uncovered note circulation to any appreciable extent. In such a country strong demand for remittance of capital to foreign countries causes a sharp rise in the rate of interest for short credits. The first capital to be drawn upon when a demand of this kind arises is always that which would otherwise have been available for short credits, and in most cases the rate of interest rises even before the remittances have been effected. Should the demand be due to a loan being contracted by a foreign Power, the amount of the loan must first be paid up by the subscribers. If it be due to a bad harvest, the farmers, disappointed in what their crops have realised, will have less capital at their disposal. But to whatever circumstance it be due, it is quite certain that the withdrawal of a considerable amount of capital from the credit market causes interest to rise. The reader will of course bear in mind that we are now thinking of a country

where there are no banks capable of meeting sudden demands for capital by granting credit more extensively. It is a proposition scarcely needing demonstration that in such a country a rise in the rate of interest charged for discounts and loans would be absolutely inevitable in the circumstances stated.

But this rise in the rate of interest will have various results. It will cause a fall in the prices of certain securities; it will discourage enterprise, and therefore have an adverse effect on the prices of certain kinds of goods; it will prevent capital being sent abroad for investment, it will in fact draw capital from abroad; it will induce merchants who have to send remittances to delay the despatch of those remittances as long as possible. Owing to all this the supply of bills will grow stronger and the demand weaker. Though a considerable change in the balance of payments seemed inevitable, several causes will have operated tending to keep it unaltered. And this will have been due to those very occurrences which gave rise to an extraordinary demand for bills.

Will this tendency be sufficiently strong to prevent any disturbance of equilibrium whatever from taking place, or will the demand for bills become excessive in spite of everything?

This is a point on which it is difficult to enunciate any general rule. A rise in the prices of foreign bills of exchange, as we have already remarked,¹ always causes imports to decline and exports to increase to some extent; but both the decline and the increase may be so slight as to be of no importance whatever. A rise in the rate of interest, on the contrary, always causes redundancy of money, because it disposes people to exercise greater economy in regulating their stocks of money; the greater the sacrifice which we have to make in order to satisfy a given want, the more disposed are we to limit ourselves to what is absolutely necessary; this general truth holds good also in regard to the need for money. When interest is high we always find a certain amount of money seeking investment, which remained uninvested while interest was low, and this operates more or less against the decline of prices and the improvement of the balance of payments, consequently in favour of the exportation of bullion. In the present hypothetical case a

¹ Cf. *ante*, p. 520.

conflict of forces will ensue. The rise in foreign bills will co-operate with other causes towards rendering the balance of payments favourable; for instance, if the demand for remittance to foreign countries be due to failure of the crops, the consequent decline of wealth will moderate the demand for bills (because it will have an adverse effect on the purchase of goods), and therefore tend to reduce prices. But the redundancy of money which follows from the reduction of stocks of money will operate in the other direction. We cannot be sure that no change will occur in the balance of payments; but we may be sure that, in the circumstances assumed, the exports of bullion will not amount to much. In a country possessing no banks, or none capable of enlarging their uncovered note circulation to any appreciable extent, the transfer of large quantities of capital to foreign countries will strongly influence the rate of interest for short credits, while its effect on the balance of payments will be only slight.

Let us now assume that a bank does exist; also that it is capable of meeting an exceptionally heavy demand for credit, and is therefore not obliged to put up its rate of interest by several points when it finds its reserve diminishing. Now things will take an entirely different course. People will be certain in this case to apply to the Bank when they find themselves in want of capital. But the banks always grant their advances either in bank notes or in the form of entries crediting the borrowers with deposits, and one can now foretell with certainty what will happen.

The notes get into circulation, but they do so at a time when no increase of the circulating medium is necessary for the requirements of trade. No decline in the prices of goods and securities will take place now, nor will an increased supply of bills be forthcoming to meet the increased demand for such paper; but money will become redundant, prices of bills will quickly reach their highest limit, and exports of bullion will take place. Nor will these exports be slight in comparison with the exceptional demand for remittance to foreign countries. On the contrary, they will continue so long as the Bank continues to be liberal in granting credit—*i.e.* in issuing notes in excess of the requirements of trade.

No properly managed bank would in such circumstances

carry its liberality so far as to make no increase whatever in its rates of interest. And were the movement to grow very strong and the Bank reserve be in danger of being reduced to too low a figure, the Bank would put up its rates considerably. But the drain of bullion would then cease, for reasons with which we are already acquainted. Meanwhile a great service would have been rendered to the public. Capital was wanted, and the Bank to a great extent supplied that want. It only issued notes at first, but soon it parted with gold and silver in exchange for these notes. It managed for a while with a smaller reserve than usual, and made considerable quantities of gold or silver available for export. The reason why it could do this was that it held a larger reserve than the law or the canons of prudent banking required. In order to render this service, the Bank drew on its *available reserve* "*surplus*." It is precisely in such circumstances as these that that "*surplus*" should be made use of.

An important rule may be deduced from this. It is an essential requisite of good administration that, under normal circumstances, the banks should not allow their uncovered note circulation to attain its utmost limit. If they observe this rule, they will be strong when abnormal conditions arise; they will be able, then, to avert trade disturbance, and an excessive rise in the rate of interest. When exceptional demand for remittance abroad manifests itself in a country where there are no banks, or none possessing an adequate reserve "*surplus*," the remittances will consist mainly of goods and securities; but when such a demand arises in a country where there are banks capable of temporarily increasing their uncovered note circulation, the remittances will consist largely of redundant gold or silver; which is an advantage.

The exported metal will return to the country later on; the Bank must replenish its reserve. But, as we pointed out when exposing the defects of the currency theory,¹ it need not do so at once. An unfavourable balance of payments, when brought about in the manner described above, is always succeeded, sooner or later, by a favourable balance. The bullion and specie supplied by the Bank in large quantities within a short space of time, for the purpose of meeting an

¹ See *ante*, p. 457.

unforeseen want, will ultimately return to the country, though it may take some time in doing so.

(d) *Alterations in the ratio of exchange with foreign countries.*—This is the fourth and last of the causes of change in the balance of payments which we intend to discuss. What such an alteration involves may be gathered from what we have said concerning money prices.¹ The labour price in any given country varies with the terms on which that country exchanges with other countries. It is higher or lower according as those terms are favourable, or the reverse. It is a sign of welfare in a country to have higher labour prices than those prevailing elsewhere, provided they be not due to protective duties. Some countries have a low level of labour prices, simply because they are unable to supply any products, which are at once easily transported, easily obtained, and strongly needed abroad.

If a country's ratio of exchange alters, then, according to our theory, its labour price must alter too, and that inversely. But how does the latter change come about? Not directly; first the ratio of exchange alters, then the balance of payments, and finally the labour price, the change in the latter being the result of the exports or imports of bullion which succeed a change in the balance of payments.

Imagine a country, whose exports consist chiefly of cattle and dairy produce, and suppose that these articles suffer a considerable depreciation in the world market. As a result, the merchant who exports them takes less than his customary amount of bills of exchange to market. Suppose that he formerly drew bills for £100,000 on England—whither he exports his goods—he will now draw for only £60,000 or £70,000, say. This will destroy the equilibrium between demand and supply in the matter of foreign bills, their price will go up, and bullion will be exported. But a country which produces no gold or silver cannot keep on exporting bullion; how, then, will equilibrium be restored? In this way. The export of bullion begins by producing a certain tightness in the money market. This tightness—but more especially the diminution of income experienced by all who sustain loss through the decline in prices of cattle and dairy

¹ See *ante*, pp. 371, 372.

produce—will operate detrimentally upon the level of labour prices, on the whole depressing it. But a fall in the level of labour prices means a diminution in the cost of production (reckoned in money) of all goods produced in the country, the effect of which must be the same as that of levying an import duty or granting an export bounty. Things that had formerly to be ordered from abroad can now be produced with advantage at home, and things that could not have been sold at a profit abroad before can now be exported with advantage. The combined effect will be a decrease in the demand for bills, an increase in their supply, and the ultimate return of their price to the point at which the export of bullion ceases to be advantageous.

The reverse case, viz. improvement of the ratio of exchange, has already afforded us material for certain comments in the last chapter of the first part of this volume.¹ Attention was there drawn to the great rise in cotton prices after 1861, and to the advantages which British India derived, if only temporarily, from that rise. Her balance of payments became exceptionally favourable; not even in the period 1889-93, under the influence of the fall in silver prices, did she import such quantities of that metal as she did between 1862 and 1866. Her (net) imports of silver in the latter period were:—

1861-62	.	.	.	90,864,560	rupees
1862-63	.	.	.	125,501,570	"
1863-64	.	.	.	127,967,190	"
1864-65	.	.	.	100,787,980	"
1865-66	.	.	.	186,686,730	"

as against an average of 117,469,912 rupees in the period 1889-93. In addition, she imported considerable quantities of gold, viz. 72,990,654 rupees per annum on an average, as compared with 24,631,462 rupees per annum in 1889-93. These surprisingly large imports of precious metal could not fail to have an effect on the labour price in British India. But here again we find that effect being produced indirectly. The balance of payments had to experience the effect of the altered ratio of exchange before the latter could operate on the labour price.

¹ See *ante*, p. 392.

In so far as a high labour price may be regarded as synonymous with a low value (again in the sense of purchasing power) of money, we may say that, owing to what had taken place, the value of money, *i.e.* of silver, had already fallen in British India before that metal had begun to depreciate in the world market. This should be noted by those who cannot understand why, when silver became redundant, owing to increased production and the closing of European Mints, it was not *at once* exported in large quantities to British India. Large exports to that country did take place later, but not at first. In a former chapter we explained this by saying that India had shortly before been "swamped" with silver. A more scientific explanation is now possible: silver had already fallen in India. Consequently its fall in the world market had to be greater than would otherwise have been necessary in order to enable it to be profitably exported to India in such quantities as many people at that time expected it would be.

All this shows with how many factors in the national life the balance of payments is connected. Changes in that balance sometimes denote mere increase or decrease of uncovered note circulation, a strengthening or weakening of the demand for remittance to foreign countries—a mere transitory occurrence, in short. Sometimes, however, they denote important facts. They may signify that the whole economic condition of the country has changed either for the better or for the worse.

§ 5

Conclusions to be drawn

We wish to draw two conclusions from the foregoing.

The first is this. Given a country whose monetary circulation does not require a continuous increase, whose standard metal is not suffering constant depreciation in the world market, and whose ratio of exchange with foreign countries is not continually improving: the imports of that country will, as a rule, consist of goods and securities, even though it should have large sums annually owing to it by other countries. If occasionally it should import some gold or silver, it will part

again with precisely as much of either metal as it has received, retaining, of course, what it requires for use in the industries.

There are countries to which far more, in fact, is owing than the amount of their own indebtedness, and of which this is true not merely in respect of a particular year, and in virtue of special causes, but regularly and in an increasing measure year by year. Say, for instance, that a country has large amounts of capital invested in foreign and colonial undertakings, and has therefore to draw the income yielded by that capital; suppose also that many of its people who have gone to distant lands to seek their fortune return every year bringing home their gains with them; that it has many ships employed in the carrying trade between foreign ports; that it earns interest and commission by granting credit to firms abroad; and lastly, suppose that it holds large amounts in foreign bonds, of which the coupons or dividend warrants become payable at regular intervals. Under such circumstances a large balance would be due from abroad each year, and what we wish to prove now is that when a country is so situated it will receive the balance, not in the form of gold or silver, but in the form of goods or securities, always provided the conditions mentioned above be fulfilled.

For if the balance were to be paid in gold or silver, redundancy of money would quickly ensue. But redundancy of money leads to the raising of prices, and the raising of prices to increase of imports and decrease of exports. Thus the balance of payments would become unfavourable.

Great Britain furnishes a striking example of what has just been said. Her imports of merchandise are always greater than her exports, and the excess is rapidly increasing. In 1856-59, it amounted to £29,000,000 per annum only; but in 1865-69 it had reached £56,000,000; in 1875-79, £119,000,000; and in 1892-95, no less than £131,000,000 per annum. This made some people uneasy at first. They regarded it as proving that the country was consuming more than it produced, which shows that the teaching of the Mercantile school still retained some hold on people's minds. But it simply confirms the doctrine just propounded. Large sums become due to Great Britain every year in respect of interest, freight, commission, and profits, and in normal times,

owing to the action of the banks, these sums will not be paid in gold; or in the event of part of them being so paid, the gold will be quickly exchanged for more useful things.¹

A condition the reverse of that of England may also exist. Take the case of a country that purchases foreign securities every year, or keeps constantly increasing the number and extent of its foreign undertakings. So long as the annual income derived from the securities and undertakings is less than the capital annually sent abroad, such a country will have to remit a balance abroad every year. But if the amount of money in circulation in the country is just sufficient; if, at the same time, the ratio of exchange with other countries does not alter, and the country's standard metal does not appreciate in the world market, the balance spoken of will be remitted in the shape of goods. Were it remitted in gold or silver, prices would drop, exports increase, imports diminish; and thus, by a change in the balance of payments, the exported bullion would be brought back into the country.

Our second conclusion has a practical bearing. What happens when a country restricts its imports by imposing high import duties? In that case the exports ultimately experience a similar reduction. Although the importance of this conclusion in forming an opinion of what is called the protective system must be evident to all, we will say a word or two to emphasise it.

Suppose that a country exports goods to the value of £50,000,000 per annum, for which it receives in payment—

£45,000,000 in goods and
£5,000,000 in securities.

Thus the account is settled in full. Presently, however, imports

¹ In normal times! There was, in fact, a great preponderance of imports over exports of bullion and specie in 1894 and 1895. This excess amounted—

In 1892 to £2,419,924.	In 1894 to £10,765,164.
„ 1893 „ 3,656,104.	„ 1895 „ 15,038,961.

This is accounted for by the large increase in the amount of “private deposits” at the Bank of England. The amount of these deposits in the last week of December was—

In 1892, £29,400,000.	In 1894, £32,800,000.
„ 1893, 29,300,009.	„ 1895, 48,500,000.

of foreign merchandise are so hampered by high import duties as to fall from £45,000,000 to £35,000,000. Thus the account no longer balances, and one of the following three things must happen.

The value of the annual imports of securities will have to increase by £10,000,000. But how is this to be brought about by increasing import duties? Such duties will not cause annual aggregate savings to increase; on the contrary, they will cause many articles to become dearer, so that there will be more likelihood of decreased than increased purchases of securities. The difficulty cannot therefore be solved in this way.

Or again, £10,000,000 worth of bullion will have to be imported. But is it likely that it will? In a period of increasing wealth Holland once increased her stock of bullion by some £7,000,000 to £8,000,000. This was between 1866 and 1876, and it took her ten years to do it. At that time the Dutch currency needed replenishing; otherwise she would either not have acquired this additional £7,000,000 to £8,000,000, or else she would have got rid of them again after a short while. A country already possessing a sufficient stock of money to meet the requirements of internal trade, cannot increase the stock without causing a rise in prices; and we know what happens then. The newly imported money can be held in reserve for a while, it is true; we should then observe a considerable increase taking place, either in the note circulation or in the deposits of the banks. But redundant money cannot remain idle for good, and as soon as it gets into circulation it begins to produce its usual effect.

The only remaining solution then would consist in a reduction of the exports of merchandise by £10,000,000, and that is, in fact, what would take place. In this way the account could be got to balance again. In some cases, it is quite clear what the articles are, of which less will be exported when the imports of certain other articles are obstructed. If Holland, with the view to fostering her cotton-spinning industry, were to prohibit the importation of yarns, many of her cotton-weaving businesses would be ruined, and her exports of woven goods would fall off considerably. Were she to close her ports to foreign wheat and rye, many grazing

lands would be put under the plough once more, and there would practically be an end to Dutch exports of cattle, sheep, and dairy produce. Were she to place any check upon her imports of iron machinery, steam engines would become dearer in Holland, and this would have an adverse effect on Dutch exports of manufactured goods in general. Even the rise in freights, which would necessarily take place in consequence of rolling-stock and vessels having to reach Dutch ports in a partly empty condition, would have an injurious effect on Dutch exports, in consequence of imports being subjected to high duties.¹ The social structure is not so simple, however, as to permit of our being always able to indicate exactly the articles, of which the exports will be impeded when high import duties are levied upon other articles. Still, there can be no reasonable doubt that any reduction of the total amount of yearly imports must sooner or later be followed by an equal reduction of the total amount of exports. A careful study of the causes which regulate the balance of payments will show this.

It would appear, therefore, that it is a mistake to suppose that "native industry" is benefited when we apply the protective system; it is simply diverted into another channel. The increased import duties destroy just about as much native industry as they create. And we shall find in a later part of this work that in most cases such a change in a country's production as may be brought about in this way is not a change for the better.

Here, then, we have one of the most important conclusions to which we are led when we study the theory of foreign

¹ The experience of Austria after 1784 affords proof of this (cf. FALKER, *Geschichte des deutschen Zollwesens*, p. 324, Leipsic, 1869). The imports of a large variety of different articles had at that time been prohibited by the Government, whereupon there followed a considerable falling off in exports. "Such a prohibition as this," writes a contemporary, "is a cruel tax levied upon many millions of people in order to be divided among a few thousand manufacturers. With the very same hand with which we prevent foreign merchants and manufacturers from bringing their wares into our country, we also prevent them from becoming purchasers of our produce, which we are anxious to sell, not only because they are neither able nor willing to pay ready-money for everything, but also because the freight comes to too much, since the carrier no longer gets any return freight. Hence many hundreds of tons of copper are lying in our warehouses," and so on. Cf. also G. K. VAN HOGENDORP, *Bijdragen tot de huishouding van Staat*, vol. i. p. 130, *et seq.*

exchanges. By doing so we become acquainted with the relation between imports and exports ; we are made to see that, regarded from the standpoint of society as a whole, the two acts of importation and exportation constitute but a single act, of which different people each perform the half, namely, the act of exchanging with foreign countries. There would be no need for proving this if every one were in the habit of paying goods and securities for such goods and securities as he himself had bought. But in most cases this does not take place, and hence we occasionally lose sight of the connection existing between what is done by the one and what is done by the other person. This connection is revealed by the theory of foreign exchanges. It is immaterial whether the people by whom goods are imported from abroad and those who pay the foreigner with other goods are identical ; if they pay with gold or silver, and that gold or silver is indispensable for internal trade, prices then reach such a level as to bring about the return of the exported metal in exchange for various kinds of products, so that payment is made in products after all.

To sum up : so long as there do not exist any causes connected with the currency itself, and therefore productive of a constant efflux or influx of bullion, our current accounts with other nations must (taking one year with another and allowing for temporary disturbances) be settled on such terms as would be the case if every individual did pay his foreign debts in goods and securities, and did require the payment of any balances owed to him in the same manner.

CHAPTER IV

THE REGULATION OF CURRENCIES

§ 1

Fixity of Value between the Divisionary Money and the Full Legal Tender Money

WE conclude this part of our work with a few observations about the regulation of currencies, under which head we include all measures, whether national or international, which should be adopted in the interest of the currency. But first, we will remind the reader of a few things with which he is already acquainted.

The coinage of every country may be divided into two groups: the divisionary money and the full legal tender money, as it is now called. The former, as its name implies, is only used for paying small sums or completing large payments. The currency laws of all countries contain a provision according to which nobody is obliged to accept more than a certain sum in divisionary money. In England this sum is forty shillings for silver and one shilling for copper coins; in Germany, twenty marks and one mark; in Holland, ten florins and twenty-five cents respectively. As befits its purpose, the divisionary money always consists of the coins of minor denomination. In England it includes all below the half-sovereign, in Holland all below the half-florin.

The second group, that of the full legal tender money, includes all the coins in which debts up to any amount may be legally discharged. Formerly the classification used to be different. The coinage was said to consist of divisionary

money and standard money, a classification which can no longer be adopted, now that there are coins which are legal tender for any amount, although they cannot properly be called standard coins. Dutch rix-dollars, florins, and half-florins are no longer standard coins. Nevertheless, they are full legal tender, and herein lies the distinction between them and the divisionary coinage. The expression, "full legal tender money," has, therefore, a wider application than rightly belongs to the expression, "standard money." It covers, not only standard money, but also the larger silver token money, of which there is now so much in circulation.

Now, one of the first principles to be observed in the regulation of currencies is that the divisionary money should stand in a fixed relation of value to the full legal tender money. Care must be taken that nothing shall disturb this relation, even temporarily. There are various requirements which the currency of a country should fulfil. It should provide a suitable assortment of coins, neither too much nor too little variety of denomination; the different kinds of coins should be readily distinguishable from each other, and be kept in a good condition; the currency should consist exclusively of coins of the country itself, *i.e.* not contain an admixture of coins of neighbouring States. All these are points of importance, which could be discussed at some length in a monograph dealing with the theory of money. But here we propose to confine ourselves to the cardinal points, and among these is the one mentioned. Without fixity of value between the divisionary money and the full legal tender money, a sovereign, for instance, might be worth 18 shillings one day and 20 or 21 shillings another. Then the currency would be in a state of confusion.

The divisionary money is exposed to the twofold danger, that it may either rise or fall in value relatively to the other money. So far as a rise is concerned, the danger has become so slight since the fall in the price of silver, as to practically amount to nil, and we only mention it as a matter of form. Take English silver money, for instance. From an ounce troy of standard silver the Royal Mint coins divisionary money to the value of 66 pence, so that if the price of silver in the world market were to rise beyond 66 pence, it would actually pay to melt down shillings and other English silver

coins provided they were of full weight. But we must go back to the year 1760 to find silver fetching as much as 66 pence per ounce, and now it is quoted at less than 30 pence. Or take the silver divisionary money of Holland. According to the Dutch law the 25-cent piece must contain 2·288, the 10-cent piece 0·896, and the 5-cent piece 0·4384 grammes of fine silver. With that metal at its present price, those quantities of silver would only fetch 12, 4·7, and 2·3 cents respectively in gold. One is rather disposed to ask whether the difference between the nominal and metallic value of the silver divisionary money of most countries has not become much too great, seeing that a very large profit could now be made by counterfeiting it. So far, however, nobody seems to have done so. Experience has shown that the divisionary money can be coined in pieces of smaller metallic value than was formerly deemed advisable.

The profit arising from the difference between the nominal and the metallic value of the divisionary money accrues to the State, the Government alone being authorised to coin such money. This advantage seems greater than it is in fact, since the cost of mintage is much heavier for small than for large coins. Moreover, it has become the custom in Holland to melt down rix-dollars for conversion into divisionary money, the object being to reduce the number of existing rix-dollars to some extent every year; an advantage, however, which is very slight in proportion to the cost which it entails.

Let us now turn to the subject of the means for preventing depreciation of the divisionary money. Depreciation is caused by redundancy; hence the divisionary money must never become redundant. The Government should coin as much of it as is necessary, but no more. In former times this rule was frequently neglected. Between 1764 and 1805 Prussia minted forty-five million thalers in divisionary money, with the result that that money depreciated considerably after the curtailment of Prussian territory under Napoleon.¹ From 1816 to 1843 the Dutch Government minted 4,700,000,000 copper duits for her Indian Colonies, and we know the disadvantage that accrued in consequence.²

¹ Cf. W. ROSCHER, *System der Volkswirtschaft*.

² Cf. *ante*, p. 434. As to the excessive issue of copper money in Russia and Sweden, see *Kupfergeldkrisen*, by A. BRÜCKNER, St. Petersburg, 1876.

The difficulty of properly regulating the quantity of divisionary money is greatest in countries where none but gold coins are full legal tender. We may assume that there are in Holland about £3,958,000 in gold ten-florin pieces, besides £11,633,000 in silver rix-dollars, florins, and half-florin pieces, or in all about £15,591,000 (including that in the vaults of the Netherlands Bank), in which debts up to any amount may be legally discharged; but the divisionary money in that country is estimated at £825,000 only, or slightly over 5 per cent. of the whole of the metallic money. No gold pieces of a less value than $2\frac{1}{2}$ florins, or, say, 4s. 2d., are coined by any of the existing Mints; coins even of that size are in fact not greatly desired in most countries. Out of a total of 8,251,000,000 francs in gold coined in France in the period 1803 to 1877, only 233,000,000, or less than 3 per cent., consisted of five-franc pieces. Out of a total of 2,895,000,000 marks in gold coined in Germany in the period 1872 to 1895, only 27,900,000 marks, or less than 1 per cent., consisted of five-mark pieces. The English Mint coins no gold pieces of less value than the half-sovereign. As a certain amount of small coins is required in those countries where the full legal tender money only consists of gold, a larger amount of these coins than elsewhere must, of course, be divisionary.

This furnishes a strong reason for not introducing the gold standard in its purest form into a country where civilisation is still in a backward condition, and more especially where the labour price is very low. In such a country small payments would be so numerous in proportion to large ones that the divisionary coins would be almost as extensively needed for trade purposes as the full legal tender coins. Instead of being, as it should be, a subsidiary, the divisionary money would then become a chief component of the currency, and fixity of value between the different kinds of coinage would be difficult to attain. Plans have repeatedly been discussed for introducing the gold standard in its undiluted form into British India, in order to achieve uniformity of standard between that extensive colony and the mother country. The British Government, however, has so far wisely abstained from adopting any of these plans. A regulation of the divisionary coinage in a country like British India, where many small

coins are required, would be impossible if the gold standard were in operation there, unless the silver token money were allowed to remain in circulation as full legal tender, which would mean applying the gold standard in a diluted form only.¹

One of the means for preventing depreciation of the divisionary money—though difficult to apply in an extensive country with few transport facilities—consists in affording opportunities in many places for exchanging such money for coins of larger denomination. The Dutch Law of March 28th, 1877, contains a clause on this subject. In Article 6 of that Law the Government is required to designate offices where it shall be possible to exchange bronze divisionary money for coins of higher denomination. There is no corresponding provision, however, with respect to the silver divisionary money: a defect in the law which it would be well to remedy.² Although the divisionary money never depreciated, it would be only right that every one should be able to dispose of superfluous small silver coin in exchange for larger money.

§ 2

Fixity of Value between the Coins constituting the Full Legal Tender Money—The Single and the Double Standard

If the divisionary money is to stand in a fixed relation of value to the full legal tender money, there must be fixity of value between the coins of which the latter group itself is composed. This brings us to a second principle to be observed in the regulation of currencies, a very important principle, independently of its bearing on the divisionary coinage.

Under the single standard no appreciable fluctuation in the relation of value is possible between coins constituting the full legal tender money. The sovereign must always

¹ Cf. *Tijdschrift voor Nederlandsch Indië*, 1876, vol. ii. pp. 425-450, where there is a very instructive essay by Dr. S. C. H. NEDERBURGH, entitled: *Proeve van een onderzoek ter beantwoording der vraag: Is de zuiver gouden muntstandaard in Nederlandsch Indië bestaanbaar?*

² It has been remedied by the new Coinage Act of May 28th, 1901, clause 12.—A. A. W.

be worth two half-sovereigns. In Holland, before 1873, a rix-dollar was necessarily always worth $2\frac{1}{2}$ florins. True, the cost of mintage is relatively heavier for small than for large money; but that is the sole circumstance which can occasion any disturbance here, nor can the disturbance ever amount to much. Moreover, it is preventible. Let the law provide that all persons ordering large money to be coined at the Mint shall be required to order a certain quantity of small money to be coined at the same time. Should a demand for small money then arise, the Government will be provided with the means for meeting it.

Here the single-currency standard presents its most attractive side to our view; this partly explains why many people prefer it. Fixity of value between the various components of the currency is so essential a requisite in any well-regulated monetary system that we need not be surprised to find special importance attached to it. And under no system is this fixity better assured—apart from the divisionary money—than under that of the single standard. With the other systems it has to be striven after; special measures have to be adopted in order to attain it. Here it comes spontaneously, as it were.

The two other systems are the double standard and that under which one metal is taken as a standard, while money coined from the other is token money. We will take the double standard first. Suppose that in Holland there were free coinage, not only of gold pieces, but of silver florins and rix-dollars as well, what could be done in order to prevent an alternating ratio of value between the gold and silver coinage?

The answer is quite simple. If Holland were the only country where the currency was regulated on these lines, nothing could be done. It is very easy to prove this, now that we are acquainted with the theory of foreign exchanges. Silver in London is worth about 30*s.* per ounce troy at the present time, and at that price the pound sterling equals about 24 florins in Dutch silver money. As bills on London are now quoted in Holland at about 12·10 florins per pound sterling, a great inducement would exist for people to avail themselves of the freedom to coin silver. Bills on England could be bought for 12·10 florins per pound sterling, and for one pound sterling

one could obtain a quantity of silver capable of being converted into 24 florins in Dutch silver money. A most noticeable change would thus take place in the Dutch balance of payments, since there would be no article which it would be so advantageous to import as silver. And this movement would not come to an end until Dutch silver money (which now follows gold in its fluctuations) had fallen to its metallic value.

But what would happen to the Dutch ten-florin pieces in the meantime? We know that it pays to export gold from Holland as soon as the Dutch price for bills on London rises beyond 12·10 florins per pound sterling. The bulk of the gold coinage of Holland would therefore be exported in a very short time. GRESHAM'S Law would operate as unfailingly as ever. To apply the double standard with a ratio of $15\frac{1}{2}:1$ ¹ as between gold and silver, while the ratio in the world market was 31:1, would inevitably result in the expulsion of gold. The overrated metal, *i.e.* silver, would supplant gold. The few ten-florin pieces left in the country would soon be worth double their face value in silver money.

We have had an object in describing all this in detail; it was designed to lead up to an important question. Suppose Germany were to adopt the measure assumed above to have been adopted in Holland; suppose France and the other countries of the Latin Union were to follow the same example; suppose then the United States, instead of a limited permission (as under the BLAND and SHERMAN Acts), were to grant unrestricted liberty to coin silver; lastly, suppose Great Britain were to reintroduce the double standard as it existed in 1816, with a ratio of $15\cdot5:1$; suppose all this to happen, would the succeeding events be precisely what we have just found that they must inevitably have been in Holland, in the event of the double standard being introduced in that country?

The reader will probably be inclined to answer in the affirmative. Why, he might ask, should the succeeding events not be precisely the same? An ounce of silver, he might argue, is now worth only $\frac{1}{31}$ of an ounce of gold in the world

¹ The ten-florin piece contains 6·048 grammes of gold; the florin 9·45 grammes of silver; so that as $6\cdot048:(10 \times 9\cdot45)::1:15\frac{1}{2}$.

market. If, in all the countries named, an ounce of silver money be regarded as the equivalent of $\frac{1}{15.5}$ or $\frac{1}{16}$ of an ounce of gold money, it means that silver money is being greatly overrated, a circumstance which must inevitably lead to its supplanting gold money.

A little reflection, however, will show that this argument is fallacious. It fails to take into account the influence of supply and demand on the value of things in exchange. If Holland, Germany, the countries of the Latin Union, Great Britain, and the United States try to exchange all their gold for silver, so that there arises a demand for tens, nay hundreds of millions of pounds' worth of silver, while a corresponding supply of gold is thrown on the market, the relation of value between the two metals cannot possibly remain unaltered. The mere throwing open of the Dutch Mint for silver would cause the price of that metal to go up. Silver would not remain long at 30*d.* per ounce if the double standard were introduced in Holland. How would it be, then, if the same system were introduced in all the great commercial countries! We may be quite sure that the mere probability of such a thing would send up the price of silver to its former level. This would no doubt be followed by the return of a certain amount of that metal from Asia, but the imported silver would be quickly absorbed over so wide an area.

Herein lies the answer to the question as to how fixity in the ratio of value between the two kinds of money is attained under the double standard. Such fixity can only be attained when the system is applied over a very extensive area; but once the system is so applied the fixity is ensured. If the double standard were introduced on a uniform basis by all the great commercial countries, there would arise a fixed relation of utility between gold and silver as media of payment. And, as we have already seen,¹ a fixed relation of utility naturally leads to a fixed relation of value.

This is the new theory of bimetallism, in which most prominent writers of the day concur. We need have no hesitation in speaking of it as one of the most important results achieved by economic investigation during the second half of the nineteenth century. All that it was possible to

¹ See *ante*, p. 360.

say of the double standard before was, that it would occasion confusion in the currency of any single country or small group of countries. Now we can say more. While fully admitting the truth of the proposition as it stood before, we are now in a position to add the words: but when applied over an extensive area, the double standard operates in a salutary manner.

The mistake of the past lay in not recognising the fact that GRESHAM'S Law (according to which the underrated is supplanted by the overrated metal), though indeed an obstacle to the successful working of the double standard when applied to a small area, is a positive guarantee for its successful working when applied over a very wide area. If there were a constant ratio of utility between wheat and rye in one small country only, then the relation between the prices of the two kinds of grain would not adjust itself in conformity to that ratio; but if the ratio of utility between the two kinds of grain were constant in all countries, and were everywhere the same, then wheat and rye would have a fixed value in relation to each other. It is the same with gold and silver. Introduced in a single country, the double standard develops into an alternating standard; either metal in turn fetching a premium over the other. Introduced on a uniform basis by a large number of States, however, the double standard brings about great constancy in the ratio of value between gold and silver.

One would hesitate to speak with such perfect confidence on this point if GRESHAM'S Law had ever been known to fail. We have been able to see from various examples, however, that there is no economic law on which greater reliance can be placed. Contrary causes appear to be quite powerless against it. If free coinage of both metals were conceded, and the banks of issue of all civilised countries were required to purchase gold and silver in a fixed proportion, GRESHAM'S Law would afford us absolute certainty that the very smallest difference in the world market between the real and the uniformly accepted ratio would elicit a very strong demand for the depreciated metal. If, for example, the ratio were 1:15.5, so that the Netherlands Bank were to purchase silver for $\frac{1}{15.5}$ of the price (1,648 florins) which it now pays for gold,

or 106·32 florins the kilogramme, then, if silver were to drop to 106 florins the kilogramme, all the bankers in Holland would try to get possession of as much of it as possible at that price in order to earn $\frac{1}{3}$ per cent.—an uncommonly handsome profit in that line of business. This would happen in Holland; and were the depreciation of silver to be general, it would happen everywhere. But how long would the depreciation last? It is only by overlooking the effect of supply and demand on the value of things that the very great difference between the operation of the double standard over a large, as compared with its operation over a small area, can be disregarded.

And yet it is this very law of supply and demand that opponents of international bimetallism are so fond of invoking. What should we think, it is asked, of an agreement among the various countries, whereby it was provided that in future two bushels of wheat should everywhere and at all times be worth the same as three bushels of rye? Gold and silver, whether coined or uncoined, are commodities, and the value of things relatively to each other depends not upon decrees or conventions, but upon economic causes.

Those who argue thus overlook one very important thing. Wheat and rye derive no single useful attribute from legislation; can it be said, however, that legislation has no effect on demand and supply in the matter of bullion? There was a time when only silver was sent to Germany when her balance of payments was favourable; now only gold is sent. Can it be said that legislation has had nothing to do with the change? In the eighteenth century the ratio of value between the two metals fell, and then England exchanged practically the whole of her silver for gold. Would this have been the case if the single silver standard had been adopted with the Recoinage Act? In 1893 the Indian Mints were closed so far as the coinage of rupees was concerned; the Sherman Act was repealed in the same year in the United States. When we compare the average price of silver for the year preceding, with that for the year following 1893, we find that it dropped from 39·75*d.* to 28·93*d.* per ounce. Was this no more than a mere coincidence?

There is yet another reason why the objection is un-

founded. It is impossible, say the objectors, to regulate the ratio of value between gold and silver by treaty. But nobody has ever proposed that it should be regulated by treaty. An agreement to introduce the double standard on a uniform basis is an international regulation of the currency, neither more nor less. Such an agreement contains no declaration to the effect that an ounce of gold shall always and everywhere be equivalent to 15·5 ounces of silver; what it does declare is, that whosoever has a debt to discharge, shall be free to use so many sovereigns or so many shillings, so many ten-florin pieces or so many rix-dollars, at his choice. And those who wish to see such an agreement brought about, merely express the *expectation* that great fixity in the ratio of value between gold and silver would naturally result from it under the ordinary rules of supply and demand. Nor do they base their expectation on theoretical considerations alone; they base it upon accurate observation of what has always happened under the operation of the double standard; upon the fact, which has been established over and over again and never disputed, that whenever the coinage of both metals is declared free, the overrated, and therefore relatively depreciated of the two, is used in preference to the other for purposes of coinage. They hold that gold could not continue for long in a state of depreciation relatively to silver, or silver relatively to gold, if in all parts of the civilised world people were hastening to avail themselves of the advantage to be derived from such a state of depreciation.

Some, too, have thought to disprove the doctrine which we are advocating by a *reductio ad absurdum*. If it were true, they say, then the double standard might be introduced at a ratio of 1 to 1, or 1 to 100—in fact at any ratio. Whatever ratio one adopted, the relation of value between the two metals would always conform to that ratio.

Certain bimetallists have not hesitated to accept this conclusion. They forget that gold and silver are used for other purposes besides those of media of exchange. The industrial demand for gold would immensely increase if gold could be had at the same price as silver; on the other hand, it would be greatly weakened if gold were a hundred times as dear. We must bear in mind that it is only the relative

utility of gold and silver as *media of exchange* that could be regulated by an international agreement. This utility is of great importance, it is true, but it is not everything. The demand for gold and silver is to a very large extent due to the fact that specie is needed, but it is not due to that fact alone.

There is a third objection. If the relation of value as fixed between gold and silver specie were also to become that between gold and silver bullion, the consequence might be that production of the one metal would be greatly stimulated, while that of the other ceased altogether. The existing stock of the latter would then be gradually used up in the industries, so that ultimately coins of the other metal alone would be found in circulation; in which case we should no longer have bi-metallism. The one metal would have superseded the other as money.

Suppose, for instance, that the agreement provided, that from 1 ounce of gold and from 15·5 ounces of silver respectively, there should be minted quantities of coin representing the same face value, and that this really resulted in the relation of value between gold and silver becoming as 1 : 15·5, or in other words, in the market price of silver rising to 60·85*d.* per ounce. Now the production of silver went on increasing considerably in recent years, even with the price of silver falling; not until 30*d.* was reached did it come to a stop. Hence, the production of silver would revive, nay, it would reach unprecedented dimensions. But then the entire currency, of which gold formed a part, would become redundant, and therefore gradually lose in purchasing power. Consequently, the incentive to produce gold would gradually decline. The output of gold would diminish year by year, and at last no gold at all would be produced. When that time had come, such gold as was required in the industries could only be got by melting coins, and the longer this process continued, the nearer we should be getting to the time when all gold would have disappeared from circulation, and even from the vaults of the banks.

The ideas underlying this argument have been represented by means of the graphic method with remarkable clearness.¹

¹ See Mr. IRVING FISHER's article entitled: "The Mechanics of Bi-metallism," in *The Economic Journal* of 1894, pp. 527-537.

But no such method is required to render the argument intelligible, and nobody can deny that what it describes belongs to the domain of possibilities. If, as regards fluctuations in their value, the two metals are connected in much the same way as two bodies of water, having a connecting pipe between them, then any great increase in the stock of silver must reduce the value of the entire circulating medium, including that of gold. It is conceivable that this reduction in values might cause gold production to cease entirely; and were this to happen, a time would certainly come when gold pieces would no longer be found except in the cabinets of coin collectors.

But what are the chances of this possibility ever being realised? The cause which weakened the production of gold would (since it operated upon the entire circulating medium) also weaken the production of silver, for the producer of the latter metal would require, as a minimum compensation for his efforts, not a certain quantity of gold, but a certain quantity of *goods*, and, by hypothesis, this quantity would constantly decrease. It may be that a given ratio of value between gold and silver would affect the production of the former more than it would that of the latter metal; as to this, however, nothing can be said *a priori*. Probably the labour required for obtaining gold and silver would be less for the one and the other metal alternately. Such has always been the case, and there is no reason to suppose that it would be otherwise.

It is true that if bimetallism were introduced *now*, at the ratio of 1 : 15·5, a strong impulse would be given to the production of silver; but this ratio, which was much in favour fifteen years ago, would no longer be acceptable. It would give the rupee a value nearly 50 per cent. higher than that which it has at present, and double the value of the Mexican dollar, another coin which circulates very largely in Eastern Asia. Incalculable confusion would result. Assuming that any scheme for the introduction of bimetallism may still be thought of at all, it would have to give full consideration to the great interests which have become bound up in the depreciation of silver, more especially in Asia. Provided these interests were considered, there would be no need to fear that the introduction of bimetallism would cause either metal to supplant the other. The objection which we have mentioned

is important rather from a theoretical than from a practical point of view.

Unfortunately, however, it must be admitted that, after the great fall which has taken place in the value of silver, the whole controversy regarding bimetallism has more theoretical than practical importance. When it began, opinions were greatly divided as to the scientific basis of the system. If it had been possible to agree on that point, the question of the ratio would have been easily solved. Now things are in an entirely different condition. Many of the best writers no longer dispute the correctness of the scientific basis; but the question of the ratio has become insoluble. To countries possessing large quantities of silver token money, standing in a ratio of 15·5, or 16 : 1, to the gold coins of the same nominal value, any other ratio than that just mentioned would occasion great loss. Take an example. In Holland 10 florins or 4 rix-dollars (94·5 grammes of silver) are worth as much as a ten-florin piece (6·048 grammes of gold), and the ratio between 94·5 grammes of silver and 6·048 grammes of gold is 15½. If the ratio of 25 : 1 were to be adopted, then the weight of the florin would have to be brought up to

$$\frac{25 \times 6\cdot048}{10} = 15\cdot12 \text{ grammes of silver, which would make it}$$

necessary for Holland, quite apart from her colonies, to purchase as many times 5·67 (*i.e.* 15·12 — 9·45) grammes of silver as there are florins, and as many times 14·175 (*i.e.* 2½ × 5·67) grammes of silver as there are rix-dollars in circulation in that country. The five-franc pieces of the Latin Union and American dollars would have to be increased in weight in about the same proportion. Naturally, countries which have large quantities of silver token money are not prepared to make the great monetary sacrifice which would be required for this purpose. Consequently, those countries are not much disposed to discuss the question of bimetallism on any other basis than that of a ratio of about 15·5; a basis which the other countries cannot accept, and which indeed they would now be right in rejecting. Not until a strong and continuous rise in the value of silver has caused the question of the ratio to cease to be a point of difference, will there be any reasonable chance of the introduction of international bimetallism.

§ 3

Standard Money and Token Money

Thus for a long time to come the question as to how fixity of value between the different full legal tender moneys of a given monetary system can be achieved, when those moneys consist partly of silver token coins, must remain a very important and vital one.

We partially answered this question when we mentioned the Dutch Law of April 27th, 1884. So long as a currency is not redundant it cannot depreciate as a whole, nor will there be grounds for anticipating depreciation of one of its component parts relatively to the other. It is only when the stock of money threatens to exceed the demand, owing either to imports from abroad or to diminished need of media of payment, that the token coinage begins to be in danger of depreciation. Then, according to the principles of the quantitative theory, a reduction of that stock becomes necessary, and the weakness of the monetary system which we are now discussing lies in the fact that under that system the reduction referred to does not take place automatically. If the English currency became redundant, so that the 113 grains of gold in the sovereign became less valuable in England than in France, the prices of foreign bills in England would undergo an immediate change, and so many notes would be applied for at the Bank in exchange for gold that the local redundancy would speedily disappear. But if the Dutch currency were to become redundant there would be no enactment compelling the Bank to issue gold. Nor could an obligation to do so be imposed on the Bank until the 80,000,000 florins of silver token money lying in the vaults of that institution had been replaced by the State with gold.

But what the Bank is not obliged by law to do, it ought to do voluntarily in so far as its resources may permit. It should always place its stock of gold at the disposal of the public for export whenever there is need to prevent a rise in the foreign exchanges, *i.e.* to counteract a redundancy of money. For this purpose the Bank should strengthen its stock of gold in normal times as much as possible; it should collect the gold which it

receives day by day and circulate little of it. Gold pieces are not necessary for inland trade; they are a convenient means of payment, but in this respect small paper is equally good and even better. For export purposes, however, only standard money can be used; and if the Bank is to be adequately supplied with such money, it must not be too ready to part with it in order to supply wants which can be equally well met with token money.

The Netherlands Bank has pursued this line of conduct since the coming into operation of the Law of June 6th, 1875, introducing the ten-florin piece. It was some time before people could understand on what principle the Bank was acting. Both its parsimony in issuing gold when required for inland purposes and its liberality in issuing the same when required for export aroused astonishment. As a matter of fact, the one was quite consistent with the other. If, for the purpose of averting depreciation of the token currency, it be absolutely necessary that in the event of a redundancy of money gold should be procurable at the Bank at par, then the Bank must neglect no means of rendering this possible. The rights conceded and the position assigned to the Bank make it the duty of that institution to do all in its power to prevent confusion of the currency—in so far as it can do this without neglecting some still higher duty.

These last words require some explanation. When, in 1883, the stock of gold in the Bank kept steadily decreasing, and fears began to be entertained that before long it would be entirely exhausted, the Government brought in the proposal which became law on April 27th, 1884, and with the purport of which the reader is already acquainted.¹ That proposal excited much controversy at the time. Such a law, people said, was not necessary for the purpose of preventing depreciation of the token currency; the Bank could at once stop exports of gold by raising the rate of interest, for a rise in the rate of interest leads to a reduction of the amount of the uncovered note circulation, and as soon as that amount has been sufficiently reduced money ceases to be redundant. Why, then, introduce a law, the execution of which will always entail considerable financial sacrifices?

¹ See *ante*, p. 440.

The error of this reasoning lay in disregarding the evils of a rise in the rate of interest and ignoring the principal function of every bank of issue. A bank should never be urged to raise its rate of interest until the *amount* of its metallic reserve is in danger of becoming too small; if any of the *components* of that reserve are insufficient, this is a defect in the currency which the bank should certainly endeavour to counteract, but which it should not be desirous of remedying at all costs. It is true that an increase in the rate of interest leads to a decrease of the uncovered note circulation, and may therefore counteract a depreciation of the silver coinage. In addition to Government notes, the currency of Holland, other than that in the Netherlands Bank, consists of four factors: (1) standard money, (2) token money, (3) covered bank notes, and (4) uncovered bank notes; if the total be redundant, the standard coins be too scattered to admit of their being collected for export in anything like large quantities, and the metallic reserve held against the note circulation consist exclusively of token money, then indeed a remedy may be found in reducing the uncovered note circulation. But it is not desirable that this should take place, for it would entail on those who are in the habit of receiving credit from the Bank, a sacrifice which, in such a case, should fall on the community as a whole. It was demanded at the time, that the Bank should restrict its credits by increasing the rate of interest, not because the Bank lacked means, nor because the convertibility of its notes was in any danger, but for a reason quite foreign to the purpose of the Bank's existence; very rightly, the Legislature was unwilling to concur in the demand. When the Bank's stock of gold is exhausted, it should raise the rate of interest only in the event of recourse to that expedient being necessary for the purpose of observing the rules of good banking administration, and not for the purpose of averting confusion of the currency. It is for the Government to guard against the latter in *such* circumstances, and in Holland the Law of April 27th, 1884, places the Government in a position to do so.

Nevertheless, there is one thing having reference to credit, which may rightly be expected of the Bank in this case, and that is a reduction of the bills drawn on places abroad.

A central banking institution may certainly hold a certain stock of these bills in the place of redundant gold, provided it have no hesitation in parting with the bills if required, or when the state of the currency renders such a course desirable. The Dutch Banking Law of August 7th, 1888, prescribes nothing on this point; it only prescribes a certain relation to be preserved between the stock of foreign bills and the total amount of the reserve surplus. It is obvious, however, that in *this* case the Bank will always take account of its stock of gold. In other terms, it will regulate its investments in foreign bills in such a manner that the stock of gold, as compared with the stock of silver money, be not too much reduced.

The line of conduct to be pursued by a Central Bank in relation to the interests which we have been considering would be fully indicated by the foregoing, were it not necessary to add a word of warning against a practice which obtains in the Bank of France. It is reprehensible on the part of a bank to raise its rates of interest in order to fulfil a duty for which the Government is responsible. But it is still more reprehensible on the part of a bank if, in order to escape or defer the necessity of raising its rate of interest, it takes advantage of its legal right to refuse to issue gold for purposes of export, because in that case a premium on gold may arise. It is usually pleaded in defence of such a policy that far greater harm results from an increase in rates of interest than from a premium on standard coins—a proposition which can scarcely be demonstrated, for, however great the number of those may be who get credits from the Bank, it is never so great as the number of those to whose interest it is that a fixed relation of value should be maintained between the different coins of the same currency. Unless there be certainty that gold will be forthcoming in the event of its being needed for export, there is no fixed limit to the extent to which the foreign exchanges may rise; they may rise far above the gold par. Such a rise would upset many calculations; it would bring unexpected gain to those who had to draw bills on foreign debtors, and unexpected loss to those who had to remit bills to foreign creditors. No

Central Bank ought to resort to such means with the object of sparing those who are in the habit of obtaining credit from it the disadvantage of increased rates of interest—a disadvantage which they could not escape if the currency were in a sound condition. Every one who gets advances from the Bank, or carries on his business in such a way as will oblige him to get paper discounted at the Bank from time to time, knows that the rates of interest are liable to change. He will gain and lose alternately by such changes. Want of fixity in the mutual relation of value between the different coins of the currency, and great uncertainty as to the height to which the prices of bills on places abroad may rise, constitute a far greater evil than want of fixity in the rates of interest; the more so that the fluctuations in the rates of interest may be kept within very narrow bounds by prudent bank management. So long as a bank possesses a stock of gold in addition to its silver token money, it should act as if it possessed nothing but gold whenever the currency threatens to become redundant. Any departure from this rule is a false step.

But, without positively refusing to issue gold, a bank may obstruct the exportation of that metal by evincing dissatisfaction with those who wish to export it, and thus making them apprehensive lest the bank should, some day, refuse them credit on the usual terms when they happen to need it. Such a policy on the part of a bank is also to be deprecated. As soon as a profit is to be made by exporting gold, it is expedient that that metal should have free egress, and the bank should place no difficulties whatever in the way of this trade. Such tactics are either successful or they are not; in the former event they do harm, and in the latter they are unnecessary. They have never been resorted to in Holland, notwithstanding the fact that the silver token money circulating in that country and in her East and West Indian colonies constitutes a far larger proportion of the total currency than is the case with the corresponding money in the countries of the Latin Union, in Germany, and in the United States. What better proof can we have of the correctness of the system pursued in Holland, than the fact that the Dutch gold coinage has never since its introduction been at a premium as compared with florins and rix-dollars? The relation of value

between the different kinds of coins which make up the currency of Holland has not for one moment been disturbed.

§ 4

The Disadvantages of Excess or Scarcity of Money

Hitherto we have been discussing the different components of the currency in their relation to each other. But there are also certain qualities which the currency as a whole is required to exhibit, and among these we again find mention made of "fixity of value." Here, however, the expression requires some explanation, as we are no longer applying it to the relation between coins of different kinds, in which case its meaning was unequivocal.

The facts that the cost of production (in labour, etc.) undergoes no change, and that nothing occurs to alter the distribution of incomes, afford no guarantee against great changes in prices and money wages, for money may become scarce and thus gain, or it may become redundant and thus lose, in purchasing power. Changes in the general level of prices, in such circumstances, show that the currency is lacking in the quality of "fixity of value," and no misunderstanding can arise from the use of that expression. When all goods cost the same in labour as they did before, and the terms of distribution of incomes remain the same, then fixity of the value of money is simply fixity of prices and money wages.

In text-books of economics we find it stated that fixity of value is one of the most needful qualities which a currency can possess. Can we accept this proposition? Yes; but only conditionally—that is to say, subject to the reservation mentioned above. When nothing happens in reference to goods and labour, which would of itself suffice to alter their prices, then it certainly is most desirable that the currency should possess fixity of value, *i.e.* of purchasing power. But people frequently neglect to mention this reservation, with the result that the expression "fixity of value," as representing one of the qualities which the currency should possess, has been understood in too wide a sense, probably in a much wider sense than was contemplated by those who insisted

upon its necessity. They probably had the reservation in their mind; but, as has frequently happened in the domain of economics, a proposition which was conceived in a conditional, but expressed in an absolute sense, has been interpreted by some persons in the latter sense. The perfectly correct theory which maintains that, provided cost of production and terms of distribution of goods remain the same, the purchasing power of money should do so, has been converted into the very questionable proposition that the purchasing power of money should remain the same under all circumstances.

From this proposition the most important deductions have been drawn. Silver fell from 62*d.* to 38*d.* per ounce between 1872 and 1892, and people said that, by the very fact of doing so, it afforded proof of its "fixity of value," seeing that the prices of goods as expressed in gold had fallen in just about the same proportion on an average. Thus the purchasing power of silver had altered but little, while that of gold had altered considerably; from which it was concluded that in the last quarter of the nineteenth century silver had exhibited greater "fixity of value" than gold.

We do not propose to inquire here into the accuracy of the statistical data invoked by those who argue thus. We do, however, emphatically protest against the interpretation which has been given to a well-known dictum. If fixity of value were to mean fixity of purchasing power under all circumstances, we should be wrong in requiring that money should exhibit that quality. There are cases in which it is most desirable that money should gain or lose in purchasing power relatively to goods; cases in which it would be impossible for money to retain its original purchasing power without giving rise to trade disturbances.

For example. Suppose the cost of production (in labour, etc.) to be reduced for all articles. According to the theory which we are endeavouring to refute, no general fall of prices ought to follow from that reduction. How, then, are the labourers to benefit by the favourable change which has come about? There is only one way in which they can do so, and that is by an increase in their money wages. Thus in order that money may be able to exhibit the desired quality of "fixity

of value," it becomes necessary that a general rise of wages should take place. Will that rise take place at once? And if it should, may it not be too slight in some places, too great in others? According to the correct conception of the quality of "fixity of value," things will take an entirely different course from that just described. Prices will decline, and that is all. Money will then acquire increased purchasing power in relation to goods, not to labour. But why should this be deemed objectionable, seeing that it is due to a cause resident not in the money itself but in the goods?

Let us reverse the hypothesis and suppose that, instead of being reduced, the cost of production (in labour, etc.) is increased for all articles. The simplest thing now is that wages should remain the same but that all prices shall go up. But according to the theory of fixity of purchasing power, prices must remain unaltered and all money wages must fall. Do the supporters of that theory realise what this implies? If the fall in money wages does not take place immediately, depression will ensue in many branches of industry; but no general fall in wages is likely to take place without many strikes and lockouts.

Let us now suppose the change in the cost of production to be confined to a certain number of articles. Suppose there are 1,000 different kinds of goods, and that 400 of them are affected by the change. According to the correct conception, the prices of these 400 articles will now have to be either raised or reduced. But if money must neither gain nor lose in purchasing power, a difficult practical problem arises. A general movement in prices in two directions will then have to take place. If the 400 articles become cheaper on the average, then the 600 will have to become dearer; otherwise the purchasing power of money must undergo a change. It has been contended that fixity of the purchasing power of money discourages speculation and imparts greater calm and stability to economic conditions. Subject to the reservation stated above, this is true; but if we omit to make that reservation, the proposition is untenable. The examples just given prove this, and at the same time show that, if we insist upon having fixity of purchasing power, we must make a choice. As soon as events like those described take place,

money must gain or lose in purchasing power either in relation to goods or in relation to labour. It cannot retain its original value in relation to both. And up to the present nobody has thought fit to explain why fixity of purchasing power in relation to goods is to be preferred to fixity of purchasing power in relation to labour.

Seeing, then, that the expression "fixity of value of money" has given rise to misconception, we must paraphrase it. What we have to understand by the rule that money shall possess fixity of value is this. There must be fixity in the relation between supply and demand as regards money; no matter what changes take place in the prices of goods, those changes must never be caused by redundancy or scarcity of money in relation to the demand, whether such demand be unchanged or not. Every rise or fall in the price of goods must be traceable to circumstances directly related to the goods themselves, or to changes in the distribution of incomes. If the condition of things be other than this, then the money is lacking in the quality of fixity of value.

But the advantage of fixity of value in money, as thus explained, is far from being universally admitted; in fact, it is only admitted partially and subject to a proviso. All agree in regarding *scarcity* of money as disadvantageous, but all do not agree in regarding *redundancy* of money in that light. More than a century and a half ago, DAVID HUME contended that redundancy of money operates beneficially, insomuch as it stimulates all kinds of enterprise, for the rise in wages resulting from it only comes about slowly, and until wages have risen all profits are greater.¹ Indeed, the prosperity which arises from this is only temporary, according to HUME; but others maintain that it must be permanent, because of the reduction of indebtedness which the redundancy of money brings about. When money loses in value, the same interest weighs less heavily on the debtor than it did before. Special stress has been laid upon this point by MACCULLOCH, by W. STANLEY JEVONS,² and among later writers by Mr. L. L.

¹ *Essay* xxv., on *Money*.—"It is easy to trace the money in its progress through the whole commonwealth, where we shall find that it must first quicken the diligence of every individual before it increases the price of labour."

² *Investigations into Currency and Finance* (London, 1884), pp. 96, 97.

PRICE¹ and F. A. WALKER.² But it is JEVONS in particular who speaks with strong emphasis. According to that writer, depreciation of the currency has almost the same effect on the community as the cancellation of his debts would have on a bankrupt.

It is difficult to pass an opinion regarding this last assertion, since many of the data needed for enabling us to form a correct judgment concerning it are lacking. If we want to know who, as a rule, loses most by the depreciation of money, we must know how the money is distributed, what classes of creditors have to wait longest for payment, by what classes the largest amount of shares and debentures respectively are held. Among the creditors who lost, we should find those in receipt of pensions, the holders of small amounts of Government stock, and those who had money in the Savings Bank. Among the debtors who gained, we should find, not only the small landowner with a heavy mortgage on his property, but the great landowner as well, who would experience relief in respect of his liability for land tax (if that tax was not reassessed at frequent intervals), or in respect of other special charges which he had to bear. We ought not, off-hand, to assign those who would gain or lose by the depreciation of money to the particular classes of society in whose condition we happen to take most interest. JEVONS may be right in what he says, only we have no proof that he is.

But what about the quickening effect which is said to be produced by redundancy of money? The effect is quite real, but it only manifests itself in certain industries, and at the price of depression in others. And the further course of things will be this: where briskness sets in, depression will follow; where depression sets in, briskness will ensue.

A few words will suffice to make this clear. The rise in all money wages and rents either takes place at once or it comes about slowly. In the former event, the stimulating effect ascribed to the depreciation of money will be wanting; in the latter, a temporary depression must ensue in those industries

¹ *Money and its Relations to Prices* (London, 1896), pp. 37-39.

² "The Relation of Changes in the Volume of the Currency to Prosperity," in the *Economic Studies* of the American Economic Association, vol. i. No. 1, pp. 35 *et seq.*

of which the products are chiefly purchased by the labouring classes, and the number of people engaged in such industries is great. These people will have to pay more and more for their various raw materials, but they will not get proportionately higher prices for their products. Nor will it be the labouring classes alone who will be temporarily placed in a less favourable position; pensioners, annuitants, all whose property is invested in debentures, landowners who have let their land for a number of years, officials whose salaries are fixed by laws or regulations—all of these, while their incomes remain the same, will have to pay higher prices for many things. These, therefore, will not be the classes among whom good sales will be effected. How will the building trade be affected? Building materials will probably have become dearer, while the rents of the smaller classes of dwellings will be more likely to have fallen than risen.

Thus depression must inevitably ensue in certain industries. The movement involved in the depreciation of money is often represented in such a way as if necessarily finished products were always the first to go up in price; but what assurance have we that the process will not in many cases begin at the raw materials, and that the finished products will not be the last to be affected? As often as this happens—and it frequently does happen,—instead of expecting increased activity we must look for the reverse.

Of course, this depression must everywhere eventually give place to activity, but also the activity, wherever produced, must again give place to depression. Both were the result of the temporary changes. The redundancy of money did not operate with equal effect on all prices, whence there arose in some cases favourable, but in others adverse, circumstances for men of business. The adverse circumstances will disappear, but so also will the favourable circumstances, and all that is built up on the assumption of their duration must collapse. The greater the activity produced by the redundancy of money, the more lasting the depression by which that activity will be succeeded.

The theory of which we are now speaking has of late assumed a new and very peculiar form. Owing to the fall in the price of silver, the price of bills on countries having a gold currency has, as we are aware, gone up very much in the

countries having a silver standard. When the rupee stood at 1s. 10*d.*, a bill on London for £1,000 did not fetch as much as 11,000 rupees ; after the rupee had fallen to 1s. 2*d.*, such a bill fetched more than 17,000 rupees. It is the opinion of some that great profits must have accrued to the silver standard countries from this ; that the rise in the prices of foreign bills operated in the same way as a premium on exports or a protective duty on imports. Be it so. It is true, and we have not failed to draw attention to the fact, that high prices of foreign bills, brought about by such a cause as this, temporarily stimulate exports and temporarily check imports. This two-fold effect was manifested in British India, for under the influence of the declining silver prices, her balance of payments became more favourable, and she received larger quantities of silver than before ; in so far as this was the case, it may be stated with truth that the export trade of British India was stimulated and her import trade checked. But was this an advantage ? Is the wealth of a country increased by parting with more goods, receiving less goods in exchange, and having the difference made up with bullion which will depreciate before long ? Only a Mercantilist could answer this question in the affirmative.

There is, however, as we have seen, just a particle of truth in this theory, and it is this, that a rise in the prices of foreign bills brought about by depreciation of bullion in the world market has for a time the same effect as a protective duty or a premium on exports. There is not a single particle of truth, however, in another theory, which has an apparent connection with that just mentioned, and according to which a similar effect is produced by a rise in the exchanges due to an extensive issue of inconvertible paper money. Issuing inconvertible notes on an extensive scale leads to an unfavourable, and not to a favourable balance of payments ; it is not by issuing, but on the contrary by restricting, the issue of uncovered notes, that exportation of goods is promoted and importation checked. There is a great difference between redundancy of money arising from its importation from abroad and redundancy of money due to increased circulation of paper money at home. In the former case the prices of foreign bills rise at once and become the *cause* of changes in prices. In the latter case the

prices of foreign bills are the very last things to rise, and their rise, instead of being the cause, is the *result* of the changes in prices of commodities. The notes get into circulation where they are not wanted. The prices of many things then go up, and as a result the balance of payments becomes unfavourable, a fact which manifests itself in the rates of exchange on foreign countries. But the alteration in these rates does not in this case operate like a premium on exports or a duty on imports; it is a symptom of the condition of things. It comes not at the beginning, but at the end of the movement. It does not alter the balance of payments, but is the result of the alteration of that balance.

By not observing this, people have fallen into strange errors. For instance, in recent years the corn exports of the Argentine increased very considerably, and the increase coincided with a strong rise in the Argentine rates of exchange on foreign countries due to the excessive issue of paper money. It was sought to establish a connection between the two occurrences; in fact, the second was declared to be the only conceivable explanation of the first.¹ This was quite wrong. The issue of inconvertible paper produced the same effect in the Argentine as it does everywhere; it caused the balance of payments to become unfavourable, thus causing the imports to increase at the cost of the exports. If at the same time the production and exports of corn increased, the remittances abroad increased still more. The strong increase in the production of corn was caused by the construction of railways—the sum total of the mileages open for traffic were 1,646, 4,506, and 8,322 in 1882, 1888, and 1893 respectively—by the great influx of capital into the Argentine, and by a considerable amount of emigration to that country. Those who ascribe to the issue of uncovered bank or Government notes the effect of furthering exports and impeding imports, must accept the conclusion that if in a particular country the stock of gold at the Bank were to become too low, it would be within the power of the Bank to replenish it by granting credits on an extensive scale, and thus putting a large amount of paper into circulation; the prices of foreign

¹ See article by W. E. BEAR in the *Economic Journal* for 1895, pp. 516-526; and *La Crise des Changes*, by EDMOND THÉRY, Paris, 1894.

bills would then rise, and we might be asked to remember that high prices of foreign bills affect the balance of payments favourably. Of course, by acting in this manner the Bank would aggravate the evil instead of remedying it. The rise in prices of foreign bills acts as a corrective in such cases, it is true; without it the balance of payments would be more unfavourable still. But this does not prove what it is desired to prove. The rise does not act as a premium on exports in such cases, it merely weakens the check on exports produced by the rise in the prices of goods; it does not act as a protective duty on imports, it simply lessens the stimulus which that rise in prices would, by itself, give to imports.

The importance of fixity of value in money in such a sense as was explained has now been shown. The consequences of scarcity of money differ but little from those of redundancy of money. It is not true, as is sometimes asserted, that the former causes nothing but depression, and the latter nothing but activity; both depression and activity result in either case. Whether the one or the other will ensue for a given industry will depend upon what prices are the first to change—those of the raw materials or those of the finished products. Manufacturers will wish the change in prices to begin at raw materials in times of scarcity, and at finished products in times of redundancy of money. But all manufacturers will not see their wishes realised; hence temporary prosperity will be the lot of some, while others will experience temporary adversity. Moreover, in times of scarcity of money, the prosperity will be succeeded by adversity, and the latter again by prosperity; for both will be due to a temporary cause, namely, reduction or increase of *margins*, which will ere long become normal again.

There is one important difference, however. In the case of increased prices brought about by redundancy of money, imaginary profits are made; in the case of reduced prices brought about by scarcity of money, imaginary losses are sustained. The former lead to excessive expenditure, the latter to increased economy. Hence the community as a whole will be more wealthy after a period of scarcity than it will after a period of redundancy of money.

What means should be adopted by each State in particular, or by all civilised States in concert, in order to impart to the currency that conditional fixity of value of which we have been speaking?

The answer to this question may be given in the form of three propositions:—I. In the case of a particular State, fixity of value of money will only be achievable when that State adopts as her standard metal, such metal as shall be employed by most civilised nations for the same purpose. II. The introduction of international bimetallism would promote fixity of value of money. III. The issue of inconvertible notes on an extensive scale operates adversely to fixity of the value of money not only in the country of issue, but also in other countries.

(I.) The following remarks may help to make the first of these propositions clearer. Obviously, the metal used by the most highly civilised nations for coinage purposes is one of which there is a plentiful stock in existence; for this reason alone the value of that metal will be less liable to be affected by every increase or decrease in its production. There is much controversy as to the true cause of the depreciation of silver. Has that depreciation been caused by the greatly increased production of silver, or by the fact that many countries have closed their Mints for silver, so far as the coinage of full legal tender money is concerned? Both of these facts have helped to bring about the depreciation. If the production had not increased, then we should have seen a fulfilment of the anticipations expressed in 1873 by certain people, that silver would become unstable, but would not, on the whole, lose much in value. But even if the Mints had not been closed to silver, that metal, in spite of its increased production, would not have depreciated very much, for the supply would have been confronted by demand.¹ The greater the area over which a given quantity of water can spread itself, the lower will be the level to which the surface of that water can rise. The same thing applies to any given cause

¹ We would refer the reader to the very interesting statistical chart given by Dr. N. P. VAN DEN BERG in the journal *De Gids* for 1892, Part II. p. 230. It shows the course of production of gold and silver in combination with the changes in the relation of value between the two metals.

inherent in the currency, and having a tendency to raise prices. The wider the area over which such a cause is free to operate, the less will be the degree in which it can achieve its effect.

To this we must add that, as a rule, civilised countries have a highly developed banking system. By alternately increasing and restricting the uncovered note circulation the effects of temporary scarcity or redundancy of metallic money may be neutralised. And this also helps to impart fixity of value to the currency.

(II.) The second proposition is a corollary to the first, being based upon the same consideration. In discussing the theoretical objections to international bimetallism we pointed out that every change which occurred in the value of either metal would be communicated to the value of the other. That being so, a shortage in the production of gold, for example, could be made up for by an increased production of silver, or the effect of an excessive production of the latter metal strongly counteracted by a reduced production of the former, if by an international convention between all civilised countries it were agreed to accept both metals as universal standard metals with a uniform ratio of value between them. We must bear in mind, it is true, that in this matter there are unfavourable as well as favourable contingencies. If it were possible to predict with certainty that gold would never become either scarce or redundant, then the countries in which the gold standard is now in operation would never be able to find any gain in a measure that connected their own standard metal with some other. This certainty is lacking, however; as has already been said, past experience gives us far more reason to expect that there will be alternate periods of inadequate and excessive production of gold. International bimetallism makes the area over which both gold and silver are standard metals co-extensive with the surface of the globe, to the exclusion only of uncivilised countries, and of those with inconvertible paper. It thus provides an extensive field for any additions to the existing stocks of gold or silver, and over that wide area these stocks will be so large that an increase in the demand for money, unless it be uncommonly strong, will not cause a decline in prices

of goods within the area in question. We know that, under existing circumstances, insuperable obstacles stand in the way of the introduction of international bimetallism. But the circumstances may alter, and then it will be our business to insist that the opportunity to do what is now impossible shall be seized without delay.

(III.) And now as to the third proposition. It is a matter of common knowledge that issues of inconvertible paper cause the money of the country in which they take place to lose all fixity of value. We wish to point out, however, that when this error is committed on anything like an extensive scale, its consequences are not confined to the country itself, but extend to other countries. When the United States, at the time of the Civil War, put some hundreds of millions of dollars in Government notes into circulation, this not only gave rise to a premium on gold in the States themselves, but caused the supply of gold everywhere else to be increased, by reason of the fact that that metal was driven out of the country in large quantities. When the Bank of France, between 1870 and 1873, increased her uncovered note circulation by about 1,800,000,000 francs, the effect on Europe was the same as if treasure to that amount had been discovered and distributed all at once. The movements in the markets for goods and securities which led up to the crisis of 1873 were undoubtedly due in some measure to this cause. And when a great country, which has entered on the evil course of issuing large amounts of inconvertible paper, retraces its steps, it needs bullion for that purpose. The demand which such a country creates then operates just as detrimentally as did the supply which it created before. Formerly it caused redundancy, now it causes scarcity. Every step in the wrong direction causes disturbances, but so also does every serious effort to retrace such a step. There is a close relation between the economic conditions of the various nations; under the influence of the growth of commerce, that relation is becoming ever closer and closer. And the manner in which one great nation attends to its economic interests may have important results for many other nations. There is no domain in which this truth is more clearly manifest than in that of currency.

APPENDIX



APPENDIX

NOTES

Part I. Chap. II. § 3, p. 87.—In order to form a correct estimate of CAREY'S historical assertion, it will be interesting to consult A. MEITZEN, *Siedelung und Agrarwesen der Westgermanen und Ostgermanen* (1895), vol. i. pp. 44 and 171, as also what J. R. MUCKE, *Urgeschichte des Ackerbaues und der Viehzucht* (1898), p. 125 *et seq.*, wrote in support of MEITZEN'S views. CAREY'S assertions are not confirmed by the results of recent investigations.

Part I. Chap. V. § 4, p. 254.—On the effects of the taxation of *entrepreneurs'* premium consult K. WICKSELL'S able chapter, entitled "Die Besteuerung des Monopolgewinnes," in his *Finanztheoretische Untersuchungen*, Jena, 1896.

Part I. Chap. VI. § 2, p. 269, footnote 1.—These words are also quoted by Mr. and Mrs. WEBB in their later work, *Industrial Democracy* (vol. i. p. 215), but with the following addition: "But this extension of the ostracism from the workplace to the home, from industrial relations to social life, is repugnant to British working-class sentiment, and has never extensively prevailed. However illogical may be the distinction, there is a general feeling, now spreading, we think, to other classes of society, that it is inexpedient to extend social ostracism beyond the sphere of the offence." It appears, however, also from this work (vol. i. p. 213), with what a degree of severity members of Trade Unions act against non-members, though at the present time only peaceful means are used. "We know personally"—so the authors write—"of no instance in which, during the present generation, physical violence has been used to compel Trade Union membership."

Part I. Chap. VI. § 3, p. 284.—On J. S. MILL'S dictum, "Demand for commodities is not demand for labour," Professor MARSHALL made some acute critical remarks in his *Principles of Economics* (4th edit. vol. i. p. 624), to which attention must be drawn.

Part I. Chap. VI. § 6, p. 305.—The doctrine here expounded is

